

Intelligent Monitoring

NHS acute hospitals

Indicators and methodology
Guidance to support the December
2014 Intelligent Monitoring update

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Introduction

CQC has developed a new model for monitoring a range of key indicators about NHS acute and specialist hospitals. These indicators relate to the five key questions we will ask of all services – are they safe, effective, caring, responsive, and well-led? This document provides the full details for each indicator used in the model and explains how we have created an overall ‘band’ for each individual acute and specialist trust.

We will use our analysis of these indicators to raise questions – not make judgements – about the quality of care. Our judgements will always follow inspections, which take into account the results of our intelligent monitoring and reports from other organisations.

This is the fourth version of the indicators we will use to help monitor quality in acute and specialist NHS trusts. We have developed this 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). We tested our proposals in July 2013 by developing a prototype version of the model, which we then used to inform the selection of trusts for our first wave of new inspections of NHS acute trusts.

We have analysed each of the indicators to identify one of the following levels for each trust:

- ‘no evidence of risk’
- ‘risk’
- ‘elevated risk’

We then created an overall summary band for each trust, by reviewing the proportion of indicators that have been identified as ‘risk’ or ‘elevated risk’ for each trust out of all the applicable indicators in the model.

This guidance provides details of how we have created the summary view for each NHS trust as well as definitions of the individual indicators. For each indicator we explain:

- how the numerator and denominator have been constructed (for quantitative indicators)
- how we have determined ‘risk’ and ‘elevated risk’
- the time period of the data source
- the data source and links to the original source (where this is available).

We have also published a separate detailed statistical methodology document on our [website](#), which supplements the details in this document.

Summary statistics for each trust

The following fields have been calculated for each NHS trust. These are provided on each trust level profile.

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.

Band: CQC has categorised trusts into one of six summary bands, with band 1 representing highest risk and band 6 with the lowest. 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) trusts are categorised as band 1*. For the trusts assigned a category based on the proportion of indicators, we have used the following thresholds:

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 $< 2.5\%$

Trusts that have had an inspection at the time of producing this update of Intelligent Monitoring have not been assigned a banding; all other indicator analysis results are shown in their report. “Recently inspected” is stated for these trusts. This is to reflect the fact that CQC’s new comprehensive inspections will provide its definitive judgements for each organisation.

Descriptions of the indicators

Never Events

Indicator ID	STEISNE	
Indicator	Never Event incidence	
Rationale	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.	
Change to indicator?	NO	
Indicator construction	The Observed value shown is the trust's numerator	
	Numerator: Count of Never Events	Denominator: Estimated total person bed days
Indicator type	Ratio of observed to expected (converted to p-value)	
Assessment of risk	Risk: Occurrence of at least 2 Never Events over the annual period where at least one event occurred in the most recent 3 months	Elevated risk: p-value less than or equal to 0.025 (95% level) OR CUSUM signal for high reporting in the most recent 3 months
Time period	01/09/2013 to 31/08/2014	
Data source	Numerator: Extract from password protected Strategic Executive Information System (STEIS) system	Denominator: Hospital Episode Statistics (HES) data supplied direct to CQC by Health and Social Care Information Centre (HSCIC)
Notes	<p>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 the riskiest trusts.</p> <p>Data used in this analysis was extracted from STEIS on 03/09/2014 and covers Never Events which occurred between 01/09/2013 and 31/08/2014</p>	

	<p>and were reported on or before 31/08/2014. Never event data is provisional and subject to change as providers investigate incidents.</p> <p>The latest Never Event guidance from NHS England is at: http://www.england.nhs.uk/wp-content/uploads/2013/12/nev-ev-list-1314-clar.pdf</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>
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Avoidable infections

Indicator ID	CDIFF	
Indicator	Incidence of Clostridium difficile (<i>C.difficile</i>)	
Rationale	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	
Change to indicator?	NO	
Indicator construction	The Observed value shown is the trust's Numerator. The Expected value is calculated using the national rate and the trust's Denominator	
	Numerator: Count of trust-apportioned <i>C.difficile</i> infections in patients aged 2 years and over	Denominator: Estimated total person bed days
Indicator type	Ratio of observed to expected (converted to z-score)	
Assessment of risk	Risk: z-score greater than or equal to 2	Elevated risk: <ul style="list-style-type: none"> z-score greater than or equal to 3

	but less than 3	OR <ul style="list-style-type: none"> CUSUM signal for high reporting in the most recent 3 months
Time period	01/08/2013 to 31/07/2014	
Data source	Numerator: Public Health England (PHE) Monthly tables: http://www.hpa.org.uk/web/HPAwebStandard/HPAweb_C/1254510678961	Denominator: NHS England, KH03 Bed availability and occupancy http://www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and-occupancy/bed-data-overnight/
Notes	<p>Quarterly KH03 data on average daily overnight bed occupancy is 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 is subject to revision. The data used in the analysis is 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>	

Indicator ID	MRSA
Indicator	Incidence of Methicillin-resistant Staphylococcus aureus (MRSA)
Rationale	<p>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</p>

Change to indicator?	NO	
Indicator construction	The Observed value shown is the trust's Numerator. The Expected value is calculated using the national rate and the trust's Denominator	
	Numerator: Count of trust-assigned MRSA bacteraemias	Denominator: Estimated total person bed days
Indicator type	Ratio of observed to expected (converted to p-value)	
Assessment of risk	Risk: <ul style="list-style-type: none"> p-value less than or equal to 0.025 but greater than 0.001 (95% level) 	Elevated risk: <ul style="list-style-type: none"> p-value less than or equal to 0.001 (99% level) OR <ul style="list-style-type: none"> CUSUM signal for high reporting in the most recent 3 months
Time-period	01/08/2013 to 31/07/2014	
Data source	Numerator: Public Health England (PHE) Monthly tables: http://www.hpa.org.uk/web/HPAwebStandard/HPAweb_C/1254510675444	Denominator: NHS England, KH03 Bed availability and occupancy http://www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and-occupancy/bed-data-overnight/
Notes	<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 is 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 is 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 is subject to revision. The data</p>	

	used in the analysis is taken at the point of original publication.
	Specialist trusts are not included in this analysis.

Deaths in low risk diagnosis groups

Indicator ID	MORTLOWR
Indicator	Dr Foster: Deaths in low risk diagnosis groups
Rationale	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
Change to indicator?	NO
Indicator construction	Further details on the construction of this measure can be found in Appendix 1
Indicator type	Ratio of counts
Assessment of risk	Elevated risk: “Higher than expected” banding
Time-period	01/04/2013 to 31/03/2014
Data source	Dr Foster Intelligence https://my.drfooster.co.uk Please note that all NHS trusts can access this data, but login details are required. Requests for login details should be sent to: support@drfooster.co.uk

Patient safety incidents

Indicator ID	NRLSL03
Indicator	Proportion of reported patient safety incidents that are harmful
Rationale	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

Change to indicator?	NO	
Indicator construction	Numerator: Count of low harm, moderate harm, severe harm and death incidents	Denominator: All reported incidents
Indicator type	z-scored	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time-period	01/06/2013 to 31/05/2014	
Data source	Numerator: CQC extract of National Reporting and Learning System (NRLS) data	Denominator: CQC extract of National Reporting and Learning System (NRLS) data
Notes	This analysis is based on the date of incident. Data used for this analysis was extracted from NRLS on 17/09/2014. Please note that this measure excludes specialist trusts.	

Indicator ID	NRLSL04
Indicator	Potential under-reporting of patient safety incidents resulting in death or severe harm
Rationale	<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 Essential Standards of Quality and Safety. 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>
Change to indicator?	NO

Indicator construction	The Observed value shown is the trust's Numerator. The Expected value is calculated using the national rate and the trust's Denominator	
	Numerator: Count of reported severe harm and death incidents	Denominator: Estimated total person bed days
Indicator type	Ratio of observed to expected (converted to z-score)	
Assessment of risk	Risk: z-score less than or equal to -2 but greater than -3	Elevated risk: z-score less than or equal to -3
Time-period	01/06/2013 to 31/05/2014	
Data source	Numerator: CQC extract of National Reporting and Learning System (NRLS) data	Denominator: Hospital Episode Statistics (HES) data supplied direct to CQC by Health and Social Care Information Centre (HSCIC)
Notes	<p>This analysis is based on the date of incident. Data used for this analysis was extracted from NRLS on 17/09/2014.</p> <p>The total person bed days information from HES includes day cases, which are counted as half days in our calculation.</p> <p>Please note that this measure excludes specialist trusts.</p>	

Indicator ID	NRLSL05	
Indicator	Potential under-reporting of patient safety incidents	
Rationale	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	
Change to indicator?	NO	
Indicator construction	The Observed value shown is the trust's Numerator. The Expected value is calculated using the national rate and the trust's Denominator	
	Numerator:	Denominator:

	Count of reported incidents (no harm, low harm, moderate harm, severe harm, death)	Estimated total person bed days
Indicator type	Ratio of observed to expected (converted to z-score)	
Assessment of risk	Risk: z-score less than or equal to -2 but greater than -3	Elevated risk: z-score less than or equal to -3
Time-period	01/06/2013 to 31/05/2014	
Data source	Numerator: CQC extract of National Reporting and Learning System (NRLS) data	Denominator: Hospital Episode Statistics (HES) data supplied direct to CQC by Health and Social Care Information Centre (HSCIC)
Notes	<p>This analysis is based on the date of incident. Data used for this analysis was extracted from NRLS on 17/09/2014.</p> <p>The total person bed days information from HES includes day cases, which are counted as half days in our calculation.</p> <p>Please note that this measure excludes specialist trusts.</p>	

Indicator ID	COM_CASIM	
Indicator	Composite of Central Alerting System (CAS): Dealing timeously with (CAS) safety alerts indicators	
Rationale	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.	
Change to indicator?	NO	
Indicator construction	<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 Appendix 6. The final risk assigned is the highest risk level from any of the three components.</p>	
Indicator type	Categorical rules based	
Assessment of risk	<p>Risk:</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>Elevated risk:</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>
Time-period	<p>Date of download: 22/09/2014</p> <p>CASIM01A01 and CASIM01C01: Alerts scheduled for completion between 01/09/2013 and 31/08/2014</p> <p>CASIM01B01: All alerts scheduled for completion up to and including 31/08/2013.</p>	
Data source	Central Alerting System	

	https://www.cas.dh.gov.uk/Home.aspx
Notes	<p>This indicator includes the following types of alert issued through the Central Alerting System:</p> <ul style="list-style-type: none"> • Patient safety alerts • Medical device alerts • Estates and Facilities notices • Other alerts issued by DH <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>

Venous Thromboembolism

Indicator ID	VTERA03	
Indicator description	Proportion of admitted patients risk assessed for Venous Thromboembolism (VTE)	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Numerator: Number of admitted patients risk assessed for VTE	Denominator: Total number of admitted patients.
Indicator type	z-scored	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/04/2014 to 30/06/2014	

Data source	Department of Health www.england.nhs.uk/statistics/statistical-work-areas/vte/
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Mortality: Trust level

Indicator ID	SHMI
Indicator	Summary Hospital Mortality Indicator (SHMI)
Rationale	A high mortality rate may indicate problems with the quality and safety of care
Change to indicator?	NO
Indicator construction	Standardised mortality both in hospital and within 30 days of discharge A full methodology is published by the Health and Social Care Information Centre (HSCIC) www.hscic.gov.uk/media/11151/Indicator-SpecificationSummary-Hospital-level-Mortality-Indicator-methodology/pdf/SHMI_Specification.pdf
Indicator type	Standardised mortality ratio
Assessment of risk	A value identified by the HSCIC as significantly higher than expected is classified as an elevated risk
Time period	01/04/2013 to 31/03/2014
Data source	Health and Social Care Information Centre (HSCIC) using Hospital Episode Statistics http://www.hscic.gov.uk/SHMI https://indicators.ic.nhs.uk/download/SHMI/October_2014/Data/SHMI.csv

Indicator ID	COM_HSMR
Indicator	Composite of Hospital Standardised Mortality Ratio indicators : HSMR - Hospital standardised mortality ratio (HSMR) HSMRWKDAY - Hospital standardised mortality ratio (weekday) HSMRWKEND - Hospital standardised mortality ratio (weekend)

Rationale	A high mortality rate may indicate problems with the quality and safety of care
Change to indicator?	NO
Indicator construction	<p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> 1. Overall trust-level HSMR 2. HSMR for patients admitted at weekends 3. HSMR for patients admitted on a weekday <p>HSMR measures in-hospital mortality among patients admitted with one of a set of 56 conditions. The methodology is described in Appendix 1</p>
Indicator type	Standardised mortality ratio (converted to z-score)
Assessment of risk	A value identified by Dr Foster as significantly higher than expected for any of the three measures is classified as an elevated risk
Time period	01/04/2013 to 31/03/2014
Data source	<p>Dr Foster Intelligence https://my.drfooster.co.uk</p> <p>Please note that all NHS trusts can access this data, but login details are required. Requests for login details should be sent to: support@drfooster.co.uk</p>

Mortality

Indicator ID	COM_CARDI
Indicator	Composite indicator: In-hospital mortality - Cardiological conditions and procedures
Rationale	A high mortality rate may indicate problems with the quality and safety of care
Change to indicator?	YES
Indicator construction	<p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> 1. An aggregate measure

	<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* (HESMORT24CU). See Appendix 4 for the indicator specification.</p> <p>2. Outlier alerts for individual diagnosis groups</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"> • Acute myocardial infarction (MORTAMI) • Cardiac arrest and ventricular fibrillation (MORTARRES) • Coronary atherosclerosis and other heart disease (MORTCATH) • Congestive heart failure; non-hypertensive (MORTCHF) • Cardiac dysrhythmias (MORTDYSRH) • Heart valve disorders (MORTHVD) • Pulmonary heart disease (MORTPHD) <p>3. Outlier alerts for procedure groups</p> <p>In-hospital mortality after the following procedures:</p> <ul style="list-style-type: none"> • CABG (isolated first time) (MORTCABGI) • CABG (other) (MORTCABGO) • Adult cardiac surgery (MORTCASUR) 	
Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	<p>Risk:</p> <p>z-score greater than or equal to 2 but less than 3 on the aggregate measure</p>	<p>Elevated risk:</p> <p>z-score greater than or equal to 3 on the aggregate measure</p> <p>or</p> <p>a CUSUM alert on the aggregate measure</p> <p>or</p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)</p>
Time period	<ol style="list-style-type: none"> 1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014 2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) 3. Outlier alerts generated or received by CQC between 01/04/2012 and 	

	19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3)
Data source	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 & Ireland, using data from the National Adult Cardiac Surgery Audit
Notes	Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/

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

Indicator ID	COM_CEREB
Indicator	Composite indicator: In-hospital mortality - Cerebrovascular conditions
Rationale	A high mortality rate may indicate problems with the quality and safety of care
Change to indicator?	YES
Indicator construction	<p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> 1. An aggregate measure 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 Appendix 4 for the indicator specification. 2. Outlier alerts for individual diagnosis groups In-hospital standardised mortality for patients admitted with a primary diagnosis matched to the following CCS category: <ul style="list-style-type: none"> Acute cerebrovascular disease (MORTACD)
Indicator type	Standardised mortality ratio (converted to z-score)

Assessment of risk	<p>Risk: z-score greater than or equal to 2 but less than 3 on the aggregate measure</p> <p>Elevated risk: z-score greater than or equal to 3 on the aggregate measure</p> <p>or</p> <p>a CUSUM alert on the aggregate measure</p> <p>or</p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)</p>
Time period	<ol style="list-style-type: none"> 1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014 2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) 3. Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3)
Data source	Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London
Notes	<p>Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends</p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</p>

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

Indicator ID	COM_DERMA
Indicator	Composite indicator: In-hospital mortality - Dermatological conditions
Rationale	A high mortality rate may indicate problems with the quality and safety of care
Change to indicator?	YES
Indicator	This is a composite indicator consisting of:

construction	<p>1. An aggregate measure</p> <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 Appendix 4 for the indicator specification.</p> <p>2. Outlier alerts for individual diagnosis groups</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"> • Skin and subcutaneous tissue infections (MORTSKINF) • Chronic ulcer of skin (MORTSKULC) 	
Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	<p>Risk:</p> <p>z-score greater than or equal to 2 but less than 3 on the aggregate measure</p>	<p>Elevated risk:</p> <p>z-score greater than or equal to 3 on the aggregate measure</p> <p>or</p> <p>a CUSUM alert on the aggregate measure</p> <p>or</p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)</p>
Time period	<p>1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014</p> <p>2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014)</p> <p>3. Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3)</p>	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London	
Notes	<p>Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends</p> <p>Information on the alerting system developed by the Dr Foster Unit at</p>	

	Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfores/currentprojects/
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*The conditions included within each diagnosis group are described in [Appendix 2](#)

Indicator ID	COM_ENDOC	
Indicator	Composite indicator: In-hospital mortality – Endocrinological conditions	
Rationale	A high mortality rate may indicate problems with the quality and safety of care	
Change to indicator?	YES	
Indicator construction	<p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> 1. An aggregate measure 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 Appendix 4 for the indicator specification. 2. Outlier alerts for individual diagnosis groups 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"> • Diabetes mellitus with complications (MORTDIABWC) • Diabetes mellitus without complications (MORTDIABWOC) • Fluid and electrolyte disorders (MORTFLUID) 	
Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3 on the aggregate measure	Elevated risk: z-score greater than or equal to 3 on the aggregate measure or a CUSUM alert on the aggregate measure

		or at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)
Time period	1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014 2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) 3. Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3)	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London	
Notes	Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/	

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

Indicator ID	COM_GASTR
Indicator	Composite indicator: In-hospital mortality - Gastroenterological and hepatological conditions and procedures
Rationale	A high mortality rate may indicate problems with the quality and safety of care
Change to indicator?	YES
Indicator construction	This is a composite indicator consisting of: 1. An aggregate measure In-hospital standardised mortality for patients admitted as an emergency and with a primary diagnosis matched to a group of

	<p>relevant CCS diagnosis categories* (HESMORT27CU). See Appendix 4 for the indicator specification.</p> <p>2. Outlier alerts for individual diagnosis groups</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"> • Biliary tract disease (MORTBILIA) • Liver disease, alcohol-related (MORTALCLIV) • Non-infectious gastroenteritis (MORTGASN) • Intestinal obstruction without hernia (MORTINTOBS) • Gastrointestinal haemorrhage (MORTGASHAE) • Other gastrointestinal disorders (MORTOGAS) • Other liver diseases (MORTOLIV) • Peritonitis and intestinal abscess (MORTPERI) <p>3. Outlier alerts for procedure groups</p> <p>In-hospital mortality after the following procedures:</p> <ul style="list-style-type: none"> • Operations on jejunum (MORTOPJEJ) • Therapeutic endoscopic procedures on biliary tract (MORTTEPBI) • Therapeutic endoscopic procedures on lower GI tract (MORTTEPLGI) • Therapeutic endoscopic procedures on upper GI tract (MORTTEPUGI) • Therapeutic operations on jejunum and ileum (MORTOJI) 	
Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	<p>Risk: z-score greater than or equal to 2 but less than 3 on the aggregate measure</p>	<p>Elevated risk: z-score greater than or equal to 3 on the aggregate measure</p> <p>or</p> <p>a CUSUM alert on the aggregate measure</p> <p>or</p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)</p>

Time period	<ol style="list-style-type: none"> 1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014 2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) 3. Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3)
Data source	Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London
Notes	<p>Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends</p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</p>

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

Indicator ID	COM_GENIT
Indicator	Composite indicator: In-hospital mortality - Genito-urinary conditions
Rationale	A high mortality rate may indicate problems with the quality and safety of care
Change to indicator?	YES
Indicator construction	<p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> 1. An aggregate measure 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 Appendix 4 for the indicator specification. 2. Outlier alerts for individual diagnosis groups In-hospital standardised mortality for patients admitted with a primary diagnosis matched to the following CCS category: <ul style="list-style-type: none"> • Urinary tract infections (MORTUTI)

Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3 on the aggregate measure	Elevated risk: z-score greater than or equal to 3 on the aggregate measure or a CUSUM alert on the aggregate measure or at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)
Time period	1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014 2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) 3. Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3)	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London	
Notes	Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/	

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

Indicator ID	COM_HAEMA
Indicator	Composite indicator: In-hospital mortality - Haematological conditions

Rationale	A high mortality rate may indicate problems with the quality and safety of care	
Change to indicator?	YES	
Indicator construction	<p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> 1. An aggregate measure 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 Appendix 4 for the indicator specification. 2. Outlier alerts for individual diagnosis groups In-hospital standardised mortality for patients admitted with a primary diagnosis matched to the following CCS category: <ul style="list-style-type: none"> Deficiency and other anaemia (MORTDEFI) 	
Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	<p>Risk: z-score greater than or equal to 2 but less than 3 on the aggregate measure</p>	<p>Elevated risk: z-score greater than or equal to 3 on the aggregate measure</p> <p>or</p> <p>a CUSUM alert on the aggregate measure</p> <p>or</p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)</p>
Time period	<ol style="list-style-type: none"> Aggregate measure (z-score): 01/05/2013 to 30/04/2014 Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3) 	

Data source	Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London
Notes	<p>Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends</p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</p>

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

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

	measure or at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)
Time period	<ol style="list-style-type: none"> 1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014 2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) 3. Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3)
Data source	Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London
Notes	<p>Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends</p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</p>

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

Indicator ID	COM_MENTA
Indicator	In-hospital mortality: Conditions associated with mental health
Rationale	A high mortality rate may indicate problems with the quality and safety of care
Change to indicator?	YES
Indicator construction	<p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> 1. An aggregate measure 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 Appendix

	<p>4 for the indicator specification</p> <p>2. Outlier alerts for individual diagnosis groups</p> <p>In-hospital standardised mortality for patients admitted with a primary diagnosis matched to the following CCS category:</p> <ul style="list-style-type: none"> • Senility and organic mental disorders (MORTSENI) 	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC	
Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	<p>Risk:</p> <p>z-score greater than or equal to 2 but less than 3 on the aggregate measure</p>	<p>Elevated risk:</p> <p>z-score greater than or equal to 3 on the aggregate measure</p> <p>or</p> <p>a CUSUM alert on the aggregate measure</p> <p>or</p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)</p>
Time period	<ol style="list-style-type: none"> 1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014 2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) 3. Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3) 	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC	
Notes	<p>Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends</p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</p>	

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

Indicator ID	COM_MUSCU	
Indicator	Composite indicator: In-hospital mortality – Musculo-skeletal conditions	
Rationale	A high mortality rate may indicate problems with the quality and safety of care	
Change to indicator?	YES	
Indicator construction	<p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> 1. An aggregate measure 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 Appendix 4 for the indicator specification. 2. Outlier alerts for individual diagnosis groups In-hospital standardised mortality for patients admitted with a primary diagnosis matched to the following CCS category: <ul style="list-style-type: none"> Pathological fracture (MORTPATH) 	
Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	<p>Risk: z-score greater than or equal to 2 but less than 3 on the aggregate measure</p>	<p>Elevated risk: z-score greater than or equal to 3 on the aggregate measure</p> <p>or</p> <p>a CUSUM alert on the aggregate measure</p> <p>or</p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)</p>
Time period	1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014	

	<p>2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014)</p> <p>3. Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3)</p>
Data source	Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London
Notes	<p>Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends</p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</p>

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

Indicator ID	COM_NEPHR
Indicator	Composite indicator: In-hospital mortality - Nephrological conditions
Rationale	A high mortality rate may indicate problems with the quality and safety of care
Change to indicator?	YES
Indicator construction	<p>This is a composite indicator consisting of</p> <ol style="list-style-type: none"> 1. An aggregate measure: 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 Appendix 4 for the indicator specification. 2. Outlier alerts for individual diagnosis groups 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"> • Acute and unspecified renal failure (MORTRENA) • Chronic renal failure (MORTRENC)

Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3 on the aggregate measure	Elevated risk: z-score greater than or equal to 3 on the aggregate measure or a CUSUM alert on the aggregate measure or at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)
Time period	1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014 2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) 3. Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3)	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London	
Notes	Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/	

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

Indicator ID	COM_NEURO
Indicator	Composite indicator: In-hospital mortality - Neurological conditions
Rationale	A high mortality rate may indicate problems with the quality and safety of care

Change to indicator?	YES	
Indicator construction	<p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> 1. An aggregate measure 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 Appendix 4 for the indicator specification. 2. Outlier alerts for individual diagnosis groups In-hospital standardised mortality for patients admitted with a primary diagnosis matched to the following CCS category: <ul style="list-style-type: none"> Epilepsy convulsions (MORTEPIL) 	
Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	<p>Risk: z-score greater than or equal to 2 but less than 3 on the aggregate measure</p>	<p>Elevated risk: z-score greater than or equal to 3 on the aggregate measure</p> <p>or</p> <p>a CUSUM alert on the aggregate measure</p> <p>or</p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)</p>
Time period	<ol style="list-style-type: none"> Aggregate measure (z-score): 01/05/2013 to 30/04/2014 Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3) 	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London	

Notes	<p>Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends</p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</p>
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*The conditions included within each diagnosis group are described in [Appendix 2](#)

Indicator ID	COM_PAEDI	
Indicator	Composite indicator: In-hospital mortality - Paediatric and congenital disorders and perinatal mortality	
Rationale	A high mortality rate may indicate problems with the quality and safety of care	
Change to indicator?	YES	
Indicator construction	<p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> 1. An aggregate measure 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 Appendix 4 for the indicator specification. 2. Outlier alerts for perinatal mortality In-hospital standardised perinatal mortality (MATPERIMOR) Further details on this indicator are provided in Appendix 5 	
Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3 on the aggregate measure	Elevated risk: z-score greater than or equal to 3 on the aggregate measure or a CUSUM alert on the aggregate

		measure or at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)
Time period	1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014 2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) 3. Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3)	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC	
Notes	Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/	

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

Indicator ID	COM_RESPI
Indicator	Composite indicator: In-hospital mortality - Respiratory conditions
Rationale	A high mortality rate may indicate problems with the quality and safety of care
Change to indicator?	YES
Indicator construction	This is a composite indicator consisting of: 1. An aggregate measure 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 Appendix 4 for the indicator specification.

	<p>2. Outlier alerts for individual diagnosis groups</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"> • Asthma (MORTASTHM) • Acute bronchitis (MORTBRONC) • Chronic obstructive pulmonary disease and bronchiectasis (MORTCOPD) • Pleurisy, pneumothorax, pulmonary collapse (MORTPLEU) <p>or to the following condition defined by ICD10 codes:</p> <ul style="list-style-type: none"> • Pneumonia (J12-J18) (MORTPNEU) 	
Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	<p>Risk: z-score greater than or equal to 2 but less than 3 on the aggregate measure</p>	<p>Elevated risk: z-score greater than or equal to 3 on the aggregate measure</p> <p>or</p> <p>a CUSUM alert on the aggregate measure</p> <p>or</p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)</p>
Time period	<ol style="list-style-type: none"> 1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014 2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) 3. Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3) 	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London	
Notes	Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends	

	<p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London:</p> <p>http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</p>
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*The conditions included within each diagnosis group are described in [Appendix 2](#)

Indicator ID	COM_TRAUM
Indicator	Composite indicator: In-hospital mortality - Trauma and orthopaedic conditions and procedures
Rationale	A high mortality rate may indicate problems with the quality and safety of care
Change to indicator?	YES
Indicator construction	<p>This is a composite indicator consisting of:</p> <ol style="list-style-type: none"> 1. An aggregate measure <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 Appendix 4 for the indicator specification.</p> 2. Outlier alerts for individual diagnosis groups <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"> • Fracture of neck of femur (hip) (MORTFNOF) • Intracranial injury (MORTINTINJ) • Other fractures (MORTOFRA) 3. Outlier alerts for procedure groups <p>In-hospital mortality after the following procedures:</p> <ul style="list-style-type: none"> • Head of femur replacement (MORTHFREP) • Hip replacement (MORTHIPREP) • Craniotomy for trauma (MORTCRAN)

	<ul style="list-style-type: none"> • Reduction of fracture of bone (MORTREDFB) • Reduction of fracture of bone (upper/lower limb) (MORTREDFBL) • Reduction of fracture of neck of femur (MORTREDFNOF) • Shunting for hydrocephalus (MORTSHUN) 	
Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3 on the aggregate measure	Elevated risk: z-score greater than or equal to 3 on the aggregate measure or a CUSUM alert on the aggregate measure or at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)
Time period	1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014 2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) 3. Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3)	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London	
Notes	Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/	

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

Indicator ID	COM_VASCU	
Indicator	Composite indicator: In-hospital mortality - Vascular conditions and procedures	
Rationale	A high mortality rate may indicate problems with the quality and safety of care	
Change to indicator?	YES	
Indicator construction	<p>This is a composite indicator consisting of</p> <ol style="list-style-type: none"> 1. An aggregate measure <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 Appendix 4 for the indicator specification.</p> 2. Outlier alerts for individual diagnosis groups <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"> • Aortic, peripheral, and visceral artery aneurysm (MORTANEUR) • Peripheral and visceral atherosclerosis (MORTPVA) 3. Outlier alerts for procedure groups <p>In-hospital mortality after the following procedures:</p> <ul style="list-style-type: none"> • Amputation of leg (MORTAMPUT) • Repair of abdominal aortic aneurysm (AAA) (MORTREPAAA) • Clip and coil aneurysms (MORTCLIP) • Other femoral bypass (MORTOFB) • Transluminal operations on the femoral artery (MORTTOFSA) 	
Indicator type	Standardised mortality ratio (converted to z-score)	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3 on the aggregate measure	Elevated risk: z-score greater than or equal to 3 on the aggregate measure or

	<p>a CUSUM alert on the aggregate measure</p> <p>or</p> <p>at least one outlier alert that is being pursued with the trust through the CQC outliers programme (see Appendix 3)</p>
Time period	<ol style="list-style-type: none"> 1. Aggregate measure (z-score): 01/05/2013 to 30/04/2014 2. Aggregate measure (CUSUM): alerts triggered during 2013/14 Quarter 4 (January to March 2014) 3. Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014. Assessment of risk is based on the status of the alert (see Appendix 3)
Data source	Hospital Episode Statistics - Protected data sent directly to CQC; Outlier alerts issued by the Dr Foster Unit at Imperial College London
Notes	<p>Information on how CQC monitors mortality: http://www.cqc.org.uk/content/monitoring-mortality-trends</p> <p>Information on the alerting system developed by the Dr Foster Unit at Imperial College London: http://www1.imperial.ac.uk/publichealth/departments/pcph/research/drfosters/currentprojects/</p>

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

Maternity and women's health

Indicator ID	MATELECCS
Indicator Description	Maternity outlier alert: Elective Caesarean sections
Rationale	<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</p>

	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.	
Change to indicator?	NO	
Indicator construction	Standardisation: Age, NHS or privately funded deliveries See Appendix 5 for the detailed Indicator construction	
	Numerator: Delivery episodes with a main procedure code of R17 (elective caesarean delivery)	Denominator: Delivery episodes; acute and specialist trusts only
Time period	Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014	
Indicator type	Standardised ratio (converted to z-score)	
Assessment of risk	Assessment of risk is based on the status of the alert (see Appendix 3)	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC	

Indicator ID	MATEMERCS
Indicator Description	Maternity outlier alert: Emergency Caesarean sections
Rationale	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), and a significantly high emergency caesarean rate may indicate quality of care concerns
Change to indicator?	NO
Indicator construction	Standardisation: Age, NHS or privately funded deliveries See Appendix 5 for the detailed Indicator construction

	Numerator: Delivery episodes with a main procedure code of R18 (other caesarean delivery)	Denominator: Delivery episodes; acute and specialist trusts only
Time period	Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014	
Indicator type	Standardised ratio (converted to z-score)	
Assessment of risk	Assessment of risk is based on the status of the alert (see Appendix 3)	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC	

Indicator ID	MATSEPSIS	
Indicator Description	Maternity outlier alert: Puerperal sepsis and other puerperal infections within 42 days of delivery	
Rationale	Significantly high rates of puerperal infection may indicate quality of care concerns	
Change to indicator?	NO	
Indicator construction	Standardisation: Age See Appendix 5 for the detailed Indicator construction	
	Numerator: 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. <i>Variation 1:</i> Puerperal sepsis (O85) and other puerperal infections (O86)	Denominator: Delivery episodes; acute and specialist trusts only

	<p><i>Variation 2: Puerperal sepsis (O85) and other <u>specified</u> puerperal infections (O86 excluding O86.4 'Pyrexia of unknown origin following delivery')</i></p> <p><i>Variation 3: Puerperal sepsis (O85)</i></p>	
Time period	Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014	
Indicator type	Standardised ratio (converted to z-score)	
Assessment of risk	Assessment of risk is based on the status of the alert (see Appendix 3)	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC	

Re-admissions

Indicator ID	MATMATRE
Indicator	Maternity outlier alert: Maternal non-elective readmissions within 42 days of delivery
Rationale	<p>Significantly high rates of readmission may indicate quality of care concerns</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"> • Readmissions with a length of stay of less than a day. • Women recorded with primary diagnoses on readmission in ICD-10 Chapter Z (<i>Factors influencing health status and contact with health services</i>)
Change to indicator?	NO
Indicator construction	<p>Standardisation: Age</p> <p>See Appendix 5 for the detailed Indicator construction</p>

	Numerator: 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	Denominator: 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
Time period	Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014.	
Indicator type	Standardised ratio (converted to z-score)	
Assessment of risk	Assessment of risk is based on the status of the alert (see Appendix 3)	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC	

Indicator ID	MATNEORE
Indicator	Maternity outlier alert: Neonatal non-elective readmissions within 28 days of delivery
Rationale	<p>Significantly high rates of readmission may indicate quality of care concerns</p> <p>The following exclusion has been made to minimise the effect of common data recording issues on the indicator:</p> <ul style="list-style-type: none"> • Readmissions with a length of stay of less than a day
Change to indicator?	NO

Indicator construction	Standardisation: None See Appendix 5 for the detailed Indicator construction	
	Numerator: 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	Denominator: 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
Time period	Outlier alerts generated or received by CQC between 01/04/2012 and 19/11/2014.	
Indicator type	Standardised ratio (converted to z-score)	
Assessment of risk	Assessment of risk is based on the status of the alert (see Appendix 3)	
Data source	Hospital Episode Statistics - Protected data sent directly to CQC	

Indicator ID	COM_ELRE_ON
Indicator	Emergency readmissions with an overnight stay within 30 days of discharge following an elective spell at the trust
Rationale	A high rate of emergency readmissions may indicate problems with the quality and safety of care.
Change to indicator?	NO
Indicator construction	<p>Numerator: 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>Denominator: Acute and specialist trusts only; emergency hospital spells within the following CCS diagnosis groups*:</p> <ul style="list-style-type: none"> • Cerebrovascular

	<ul style="list-style-type: none"> • Vascular • Cardiology • Respiratory medicine • Infectious diseases • Gastroenterology and hepatology • Haematology • Endocrinology • Nephrology • Genito-urinary medicine • Paediatrics and congenital disorders • Mental illness • Neurology • Dermatology • Musculoskeletal • Trauma and orthopaedics • Other injuries & conditions due to external causes <p>Exclusions:</p> <p>Birth and delivery spells Regular attenders Spells where any cancer is recorded (ICD10 C00-C97, D37-D48) 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"> • Cancer specialist trusts • Women's specialist trusts • Moorfields Eye Hospital NHS Foundation Trust • Children's specialist trusts <p>Standardisation:</p> <p>Age, sex, primary diagnosis at admission (3 character ICD 10 code), Charlson Index</p>	
Indicator type	Standardised ratio (converted to z-score)	
Assessment of risk	<p>Risk: z-score greater than or equal to 2 but less than 3 (HESELRE_ON)</p>	<p>Elevated risk: z-score greater than or equal to 3 (HESELRE_ON)</p> <p>or</p>

	a CUSUM alert (HESELRECU_ON)
Time period	<ul style="list-style-type: none"> HESELRE_ON (z-score): 01/04/2013 to 31/03/2014 HESELRECU_ON (CUSUM): Alerts triggered during 2013/14 Quarter 4 (January to March 2014)
Data source	Hospital Episode Statistics – Protected data sent directly to CQC
Notes	<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>http://www.hscic.gov.uk/media/11151/Indicator-Specification-Summary-Hospital-level-Mortality-Indicator-methodology/pdf/SHMI_Specification.pdf</p>

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

Indicator ID	COM_EMRE_ON
Indicator	Emergency readmissions with an overnight stay within 30 days of discharge following an emergency spell at the trust
Rationale	A high rate of emergency readmissions may indicate problems with the quality and safety of care
Change to indicator?	NO
Indicator construction	<p>Numerator: 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>Denominator: Acute and specialist trusts only; emergency hospital spells within the following CCS diagnosis groups*</p> <ul style="list-style-type: none"> Cerebrovascular Vascular Cardiology Respiratory medicine Infectious diseases Gastroenterology and hepatology Haematology

	<ul style="list-style-type: none"> • Endocrinology • Nephrology • Genito-urinary medicine • Paediatrics and congenital disorders • Mental illness • Neurology • Dermatology • Musculoskeletal • Trauma and orthopaedics • Other injuries & conditions due to external causes <p>Exclusions:</p> <p>Birth and delivery spells Regular attenders Spells where any cancer is recorded (ICD10 C00-C97, D37-D48) 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"> • Cancer specialist trusts • Women's specialist trusts • Moorfields Eye Hospital NHS Foundation Trust • Neurology specialist trusts • Orthopaedic specialist trusts • Children's specialist trusts <p>Standardisation: Age, sex, primary diagnosis at admission (3 character ICD 10 code), Charlson Index</p>	
Indicator type	Standardised ratio (converted to z-score)	
Assessment of risk	<p>Risk: z-score greater than or equal to 2 but less than 3 (HESEMRE_ON)</p>	<p>Elevated risk: z-score greater than or equal to 3 (HESEMRE_ON)</p> <p>or</p> <p>a CUSUM alert (HESEMRECU_ON)</p>
Time period	<ul style="list-style-type: none"> • HESELRE_ON (z-score): 01/04/2013 to 31/03/2014 • HESELRECU_ON (CUSUM): Alerts triggered during 2013/14 Quarter 4 (January to March 2014) 	

Data source	Hospital Episode Statistics – Protected data sent directly to CQC
Notes	<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>http://www.hscic.gov.uk/media/11151/Indicator-Specification-Summary-Hospital-level-Mortality-Indicator-methodology/pdf/SHMI_Specification.pdf</p>

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

PROMs

Indicator ID	PROMS52	
Indicator	PROMs EQ-5D score: Groin hernia repair	
Rationale	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.	
Change to indicator?	NO	
Indicator construction	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 upper or lower 95% and 99.8% control limits.	
Indicator type	Categorical rules based	
Assessment of risk	Risk: Trusts which lie below the lower 95% control limit as identified by HSCIC using EQ-5D	Elevated risk: Trusts which lie below the lower 98.8% control limit as identified by HSCIC using EQ-5D
Time-period	01/04/2013 to 31/03/2014	
Data source	Health and Social Care Information Centre (HSCIC) Patient reported outcome measures (PROMS)	

	http://www.hscic.gov.uk/proms
Notes	<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>http://www.hscic.gov.uk/media/1537/A-Guide-to-PROMs-Methodology/pdf/PROMS_Guide_v5.pdf</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>

Indicator ID	PROMS_HIP
Indicator	Composite indicator: PROMs - Hip Replacement (PRIMARY)
Rationale	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.
Change to indicator?	NO
Indicator construction	<p>EQ-5D and Oxford hip score are two of the assessment methodologies used by the HSCIC to measure health gain following hip replacement. For each assessment methodology HSCIC provide detail regarding outlier trusts as part of the final PROMS publication. Outlier trusts are defined by the HSCIC as being outside of either 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.</p> <p>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>	
Indicator type	Categorical rules based	
Assessment of risk	<p>Risk:</p> <p>Trusts which lie below the lower 95% control limit as identified by HSCIC using the EQ-5D and/or the Oxford Hip methodologies</p>	<p>Elevated risk:</p> <p>Trusts which lie below the lower 99.8% control limit as identified by HSCIC using the EQ-5D and/or the Oxford Hip methodologies</p>
Time-period	01/04/2013 to 31/03/2014	
Data source	<p>Health and Social Care Information Centre (HSCIC)</p> <p>Patient reported outcome measures (PROMS)</p> <p>http://www.hscic.gov.uk/proms</p>	
Notes	<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>http://www.hscic.gov.uk/media/1537/A-Guide-to-PROMs-Methodology/pdf/PROMS_Guide_v5.pdf</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>	

Indicator ID	PROMS_KNEE
Indicator	Composite indicator: PROMs - Knee Replacement (PRIMARY)
Rationale	<p>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</p>

	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.	
Change to indicator?	NO	
Indicator construction	<p>EQ-5D and Oxford knee score are two of the assessment methodologies used by the HSCIC to measure health gain following knee replacement. For each assessment methodology HSCIC provide detail regarding outlier trusts as part of the final PROMS publication. Outlier trusts are defined by the HSCIC as being outside of either 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 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>	
Indicator type	Categorical rules based	
Assessment of risk	Risk: Trusts which lie below the lower 95% control limit as identified by HSCIC using the EQ-5D and/or the Oxford Knee methodologies	Elevated risk: Trusts which lie below the lower 99.8% control limit as identified by HSCIC using the EQ-5D and/or the Oxford Knee methodologies
Time-period	01/04/2013 to 31/03/2014	
Data source	Health and Social Care Information Centre (HSCIC) Patient reported outcome measures (PROMS) http://www.hscic.gov.uk/proms	
Notes	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	

	<p>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>http://www.hscic.gov.uk/media/1537/A-Guide-to-PROMs-Methodology/pdf/PROMS_Guide_v5.pdf</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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Audit

Indicator ID	NHFD01
Indicator	National Hip Fracture Database: measure of cases assessed as achieving compliance with all nine Best Practice Tariff standards of care
Rationale	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
Change to indicator?	NO
Indicator construction	<p>Numerator: Number of cases achieving compliance with all nine best practice tariff standards of care, as follows:</p> <ul style="list-style-type: none"> • 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 • Admission under the joint care of a consultant geriatrician and a consultant orthopaedic surgeon • Admission using an assessment protocol agreed by geriatric medicine, orthopaedic surgery and anaesthesia • Assessment by a geriatrician in the perioperative period (within 72 hours of admission) • Postoperative geriatrician-directed multi-professional rehabilitation

	<p>team</p> <ul style="list-style-type: none"> • Fracture prevention assessment - falls • Fracture prevention assessment - bone health • First Abbreviated Mental Test (AMT) performed before surgery and scores recorded in NHFD • Second AMT performed after surgery but within the same spell and scores recorded in NHFD <p>Denominator: All patients admitted with a hip fracture.</p>	
Indicator type	z-scored	
Assessment of risk	<p>Risk: z-score greater than or equal to 2 but less than 3</p>	<p>Elevated risk: z-score greater than or equal to 3</p>
Time period	01/01/2013 to 31/12/2013	
Data source	Royal College of Physicians, National Hip Fracture Database www.nhfd.co.uk	

Indicator ID	SSNAPD02
Indicator	SSNAP Domain 2: overall team-centred level for key stroke unit indicators
Rationale	<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>www.rcplondon.ac.uk/stroke/guidelines</p>
Change to indicator?	YES
Indicator construction	<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"> • 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

	<p>stroke occurred in hospital it refers to the time of onset of symptoms)</p> <ul style="list-style-type: none"> • Median time between clock start and arrival on a stroke unit • Proportion of patients who spent at least 90% of their stay on a stroke unit <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 April and June 2014:</p> <p>SSNAP Results Portal</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"> • 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. • If one or more team has submitted insufficient or no data, the trust will be assigned an elevated risk. • Both routinely admitting and non-routinely admitting acute teams are included (but not non-acute inpatient teams) • 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 • 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 (first link above).
Indicator type	Categorical rules based
Assessment of risk	<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’ SSNAP Team centred level D → ‘risk’ SSNAP Team centred level E → ‘elevated risk’ Insufficient or no data → ‘elevated risk’</p>
Time-period	01/04/2014 to 30/06/2014
Data source	Royal College of Physicians

	<p>Sentinel Stroke National Audit Programme</p> <p>SSNAP Results Portal</p>
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Compassionate care

Indicator ID	IPSURTALKWOR	
Indicator	Inpatient Survey 2013 Q34 "Did you find someone on the hospital staff to talk to about your worries and fears?"	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Scores, as described in Appendix A of the Technical Document: http://www.nhssurveys.org/Filestore/documents/%20IP13%20technical%20document%20v2.pdf	
Indicator type	Modified z-score	
Assessment of risk	Risk: Trusts with scores that are statistically worse than the national average with 95% significance	Elevated Risk: Trusts with scores that are statistically worse than the national average with 99% significance
Time period	Inpatients spending at least one night in hospital from 01/06/2013 to 31/08/2013	
Data source	Adult Inpatient Survey (CQC) http://www.nhssurveys.org/surveys/765	

Indicator ID	IPSURSUPEMOT	
Indicator	Inpatient Survey 2013 Q35 "Do you feel you got enough emotional support from hospital staff during your stay?"	
Rationale	Patients should feel emotionally supported by hospital staff during their	

	stay to make them feel comfortable and at ease while receiving treatment	
Change to indicator?	NO	
Indicator construction	Scores, as described in Appendix A of the Technical Document: http://www.nhssurveys.org/Filestore/documents/%20IP13%20technical%20document%20v2.pdf	
Indicator type	Modified z-score	
Assessment of risk	Risk: Trusts with scores that are statistically worse than the national average with 95% significance	Elevated Risk: Trusts with scores that are statistically worse than the national average with 99% significance
Time period	Inpatients spending at least one night in hospital from 01/06/2013 to 31/08/2013	
Data source	Adult Inpatient Survey (CQC) http://www.nhssurveys.org/surveys/765	

Meeting physical needs

Indicator ID	IPSURHELPEAT	
Indicator	Inpatient Survey 2013 Q23 "Did you get enough help from staff to eat your meals?"	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Scores, as described in Appendix A of the Technical Document: http://www.nhssurveys.org/Filestore/documents/%20IP13%20technical%20document%20v2.pdf	
Indicator type	Modified z-score	
Assessment of risk	Risk: Trusts with scores that are statistically worse than the	Elevated Risk: Trusts with scores that are statistically worse than the national average with

	national average with 95% significance	99% significance
Time period	Inpatients spending at least one night in hospital from 01/06/2013 to 31/08/2013	
Data source	Adult Inpatient Survey (CQC) http://www.nhssurveys.org/surveys/765	

Indicator ID	IPSURINVDECI	
Indicator	Inpatient Survey 2013 Q32 "Were you involved as much as you wanted to be in decisions about your care and treatment?"	
Rationale	Staff should make sure that patients are involved in decisions around their care and treatment as much as they want to be	
Change to indicator?	NO	
Indicator construction	Scores, as described in Appendix A of the Technical Document: http://www.nhssurveys.org/Filestore/documents/%20IP13%20technical%20document%20v2.pdf	
Indicator type	Modified z-score	
Assessment of risk	Risk: Trusts with scores that are statistically worse than the national average with 95% significance	Elevated Risk: Trusts with scores that are statistically worse than the national average with 99% significance
Time period	Inpatients spending at least one night in hospital from 01/06/2013 to 31/08/2013	
Data source	Adult Inpatient Survey (CQC) http://www.nhssurveys.org/surveys/765	

Indicator ID	IPSURCNTPAIN	
Indicator	Inpatient Survey 2013 Q39 "Do you think the hospital staff did everything they could to help control your pain?"	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Scores, as described in Appendix A of the Technical Document: http://www.nhssurveys.org/Filestore/documents/%20IP13%20technical%20document%20v2.pdf	
Indicator type	Modified z-score	
Assessment of risk	Risk: Trusts with scores that are statistically worse than the national average with 95% significance	Elevated Risk: Trusts with scores that are statistically worse than the national average with 99% significance
Time period	Inpatients spending at least one night in hospital from 01/06/2013 to 31/08/2013	
Data source	Adult Inpatient Survey (CQC) http://www.nhssurveys.org/surveys/765	

Overall experience

Indicator ID	COM_PLACE
Indicator	Composite indicator: Patient-Led Assessment of the Care Environment (PLACE)
Rationale	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.
Change to indicator?	NO

Indicator construction	<p>An individual proportion value is calculated for each of the four domains. The numerator and denominator values used for each individual domain are the sum of all scores achieved and the sum of the maximum scores possible respectively for all aspects of the care environment assessed pertaining to that domain.</p> <p>Each of the four proportion values are z-scored and rules based assessment is applied to calculate a final PLACE trust level score that incorporates all four domains. The rule applied to calculate the final risk score is the highest risk identified through z-score analysis across any of the four domains is the final risk score.</p>	
Indicator type	Categorical rules based	
Assessment of risk	Risk: <ul style="list-style-type: none"> • z-score greater than or equal to 2, but less than 3, for one or more of the four domains. • No domain with a z-score greater than or equal to 3. 	Elevated risk: <ul style="list-style-type: none"> • z-score greater than or equal to 3 for one of more of the four domains.
Time-period	29/01/2014 to 17/06/2014	
Data source	<p>Health and Social Care Information Centre (HSCIC)</p> <p>Patient-led assessments of the care environment (PLACE)</p> <p>http://www.england.nhs.uk/ourwork/qual-clin-lead/place/</p>	

Indicator ID	IPSUROVERALL
Indicator	Inpatient Survey 2013 Q68 "Overall..." (I had a very poor/good experience)
Rationale	This shows the overall summary of patient experience (taking into account all aspects of their hospital stay).
Change to indicator?	NO
Indicator construction	<p>Scores, as described in Appendix A of the Technical Document:</p> <p>http://www.nhssurveys.org/Filestore/documents/%20IP13%20technical%20document%20v2.pdf</p>

Indicator type	Modified z-score	
Assessment of risk	Risk: Trusts with scores that are statistically worse than the national average with 95% significance	Elevated Risk: Trusts with scores that are statistically worse than the national average with 99% significance
Time period	Inpatients spending at least one night in hospital 01/06/2013 to 31/08/2013	
Data source	Adult Inpatient Survey (CQC) http://www.nhssurveys.org/surveys/765	

Indicator ID	FFTNHSESCORE	
Indicator	NHS England Inpatient score from Friends and Family Test	
Rationale	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	
Change to indicator?	YES	
Indicator construction	Inpatient score: <ul style="list-style-type: none"> • Short Term % change is the relative percentage change in score between the latest quarter and the previous quarter • Long Term % change is the relative percentage change in score between the latest quarter and the previous 3 quarters 	
Indicator type	Measure changes within each Trust	
Assessment of risk	Risk: 6% score reduction	Elevated risk: 12% score reduction
Time period	01/08/2013 to 31/07/2014	
Data source	Friends and Family Test (FFT) www.england.nhs.uk/statistics/statistical-work-areas/friends-and-family-test/friends-and-family-test-data	

Treatment with dignity and respect

Indicator ID	IPSURRSPDIGN	
Indicator	Inpatient Survey 2013 Q67 "Overall, did you feel you were treated with respect and dignity while you were in the hospital?"	
Rationale	Patients should feel they are treated with dignity and respect by the care staff during their hospital stay	
Change to indicator?	NO	
Indicator construction	Scores, as described in Appendix A of the Technical Document: http://www.nhssurveys.org/Filestore/documents/%20IP13%20technical%20document%20v2.pdf	
Indicator type	Modified z-score	
Assessment of risk	Risk: Trusts with scores that are statistically worse than the national average with 95% significance	Elevated Risk: Trusts with scores that are statistically worse than the national average with 99% significance
Time period	Inpatients spending at least one night in hospital from 01/06/2013 to 31/08/2013	
Data source	Adult Inpatient Survey (CQC) http://www.nhssurveys.org/surveys/765	

Trusting relationships

Indicator ID	IPSURCONFDOC	
Indicator	Inpatient Survey 2013 Q25 "Did you have confidence and trust in the doctors treating you?"	
Rationale	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	
Change to indicator?	NO	

Indicator construction	Scores, as described in Appendix A of the Technical Document: http://www.nhssurveys.org/Filestore/documents/%20IP13%20technical%20document%20v2.pdf	
Indicator type	Modified z-score	
Assessment of risk	Risk: Trusts with scores that are statistically worse than the national average with 95% significance	Elevated Risk: Trusts with scores that are statistically worse than the national average with 99% significance
Time period	Inpatients spending at least one night in hospital from 01/06/2013 to 31/08/2013	
Data source	Adult Inpatient Survey (CQC) http://www.nhssurveys.org/surveys/765	

Indicator ID	IPSURCONFNUR	
Indicator	Inpatient Survey 2013 Q28 "Did you have confidence and trust in the nurses treating you?"	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Scores, as described in Appendix A of the Technical Document: http://www.nhssurveys.org/Filestore/documents/%20IP13%20technical%20document%20v2.pdf	
Indicator type	Modified z-score	
Assessment of risk	Risk: Trusts with scores that are statistically worse than the national average with 95% significance	Elevated Risk: Trusts with scores that are statistically worse than the national average with 99% significance
Time period	Inpatients spending at least one night in hospital from 01/06/2013 to 31/08/2013	

Data source	Adult Inpatient Survey (CQC) http://www.nhssurveys.org/surveys/765
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A&E Survey

Indicator ID	AESURWAIT	
Indicator	A&E Survey 2014 Q7 "From the time you first arrived at the A&E Department, how long did you wait before being examined by a doctor or nurse?"	
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	
Change to indicator?	NEW INDICATOR	
Indicator construction	Scores, as described in the Technical Document: http://www.nhssurveys.org/surveys/819	
Indicator type	Modified z-score	
Assessment of risk	Risk:	Elevated Risk:
	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) http://www.nhssurveys.org/survey/1380	

Indicator ID	AESURCONFID	
Indicator	A&E Survey 2014 Q14 "Did you have confidence and trust in the doctors and nurses examining and treating you?"	
Rationale	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	

Change to indicator?	NEW INDICATOR	
Indicator construction	Scores, as described in the Technical Document: http://www.nhssurveys.org/surveys/819	
Indicator type	Modified z-score	
Assessment of risk	Risk:	Elevated Risk:
	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) http://www.nhssurveys.org/survey/1380	

Indicator ID	AESURPRIV	
Indicator	A&E Survey 2014 Q18 "Were you given enough privacy when being examined or treated?"	
Rationale	Patients should feel their privacy is respected during examinations and treatment.	
Change to indicator?	NEW INDICATOR	
Indicator construction	Scores, as described in the Technical Document: http://www.nhssurveys.org/surveys/819	
Indicator type	Modified z-score	
Assessment of risk	Risk:	Elevated Risk:
	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) http://www.nhssurveys.org/survey/1380	

Indicator ID	AESURATTENT	
Indicator	A&E Survey 2014 Q19 "If you needed attention, were you able to get a member of medical or nursing staff to help you?"	
Rationale	Patients should be made to feel comfortable enough to ask staff for help when needed and feel that their needs are being met.	
Change to indicator?	NEW INDICATOR	
Indicator construction	Scores, as described in the Technical Document: http://www.nhssurveys.org/surveys/819	
Indicator type	Modified z-score	
Assessment of risk	Risk:	Elevated Risk:
	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) http://www.nhssurveys.org/survey/1380	

Indicator ID	AESURREASS	
Indicator	A&E Survey 2014 Q22 "If you were feeling distressed while you were in the A&E Department, did a member of staff help to reassure you?"	
Rationale	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	
Change to indicator?	NEW INDICATOR	
Indicator construction	Scores, as described in the Technical Document: http://www.nhssurveys.org/surveys/819	
Indicator type	Modified z-score	
Assessment of risk	Risk:	Elevated Risk:
	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) http://www.nhssurveys.org/survey/1380

Indicator ID	AESURPAIN	
Indicator	A&E Survey 2014 Q30 "Do you think the hospital staff did everything they could to help control your pain?"	
Rationale	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	
Change to indicator?	NEW INDICATOR	
Indicator construction	Scores, as described in the Technical Document: http://www.nhssurveys.org/surveys/819	
Indicator type	Modified z-score	
Assessment of risk	Risk:	Elevated Risk:
	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) http://www.nhssurveys.org/survey/1380	

Indicator ID	AESURCONT	
Indicator	A&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&E Department?"	
Rationale	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.	
Change to indicator?	NEW INDICATOR	
Indicator construction	Scores, as described in the Technical Document: http://www.nhssurveys.org/surveys/819	

Indicator type	Modified z-score	
Assessment of risk	Risk:	Elevated Risk:
	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) http://www.nhssurveys.org/survey/1380	

Indicator ID	AESURDIGRES	
Indicator	A&E Survey 2014 Q42 "Overall, did you feel you were treated with respect and dignity while you were in the A&E Department?"	
Rationale	Patients should feel they are treated with dignity and respect by the care staff during their visit to A&E	
Change to indicator?	NEW INDICATOR	
Indicator construction	Scores, as described in the Technical Document: http://www.nhssurveys.org/surveys/819	
Indicator type	Modified z-score	
Assessment of risk	Risk:	Elevated Risk:
	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) http://www.nhssurveys.org/survey/1380	

Access measures

Indicator ID	COM_AD_A&E
Indicator description	Composite indicator: A&E waiting times more than 4 hours

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	
Change to indicator?	NO	
AD_A&E13	Proportion of patients spending more than 4 hours in Type 1 only A&E departments from arrival to discharge, transfer or admission	
Indicator construction	Numerator: Number of patients spending more than 4 hours in a Type 1 A&E department from arrival to discharge, transfer or admission	Denominator: The total number of patients attending a Type 1 A&E department
Indicator type	z-scored	
Assessment of risk	Goal value set at 95% (As recommended by Department of Health's Operating Framework for the NHS in England 2012/13)	
	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/07/2014 to 30/09/2014	
Data source	NHS England www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/	
AD_A&E14	Proportion of patients spending more than 4 hours in Type 2 only A&E departments from arrival to discharge, transfer or admission	
Indicator construction	Numerator: Number of patients spending more than 4 hours in a Type 2 A&E department from arrival to discharge, transfer or admission	Denominator: The total number of patients attending a Type 2 A&E department
Indicator type	z-scored	
Assessment	Goal value set at 95% (As recommended by Department of Health's	

of risk	Operating Framework for the NHS in England 2012/13)	
	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/04/2014 to 30/06/2014	
Data source	NHS England www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/	
AD_A&E15	Proportion of patients spending more than 4 hours in Type 3 only A&E departments from arrival to discharge, transfer or admission	
Indicator construction	Numerator: Number of patients spending more than 4 hours in a Type 3 A&E department from arrival to discharge, transfer or admission	Denominator: The total number of patients attending a Type 3 A&E department.
Indicator type	z-scored	
Assessment of risk	Goal value set at 95% (As recommended by Department of Health's Operating Framework for the NHS in England 2012/13)	
	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/07/2014 to 30/09/2014	
Data source	NHS England www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/	

Indicator ID	COM_RTT
Indicator description	Composite monthly Referral to Treatment (RTT) waiting times
Assessment of Risk	Composite indicator of RTT_01, RTT_02 and RTT_03 where the indicator with highest risk determines composite result
Rationale	The NHS Operating Framework for 2012/13 sets the Referral to Treatment (RTT) operational standards: 90% of admitted and 95% of non-admitted

	<p>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>	
Change to indicator?	NO	
RTT_01	Monthly Referral to Treatment (RTT) waiting times for completed admitted pathways (on an adjusted basis): percentage within 18 weeks	
Indicator construction	Numerator: Number of completed admitted pathways (with a known clock start) within 18 weeks	Denominator: Total number of completed admitted pathways (with a known clock start)
Indicator type	z-scored	
Assessment of risk	Risk is determined through z-score analysis using the national average for acute trusts as the expected value.	
	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/07/2014 to 31/07/2014	
Data source	NHS England www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/	
RTT_02	Monthly Referral to Treatment (RTT) waiting times for completed non-admitted pathways: percentage within 18 weeks	
Indicator construction	Numerator: Number of completed non-admitted pathways (with a known clock start) within 18 weeks	Denominator: Total number of completed non-admitted pathways (with a known clock start)
Indicator type	z-scored	
Assessment of risk	Risk is determined through z-score analysis using the national average for acute trusts as the expected value.	

	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/07/2014 to 31/07/2014	
Data source	NHS England www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/	
RTT_03	Monthly Referral to Treatment (RTT) waiting times for incomplete pathways: percentage within 18 weeks	
Indicator construction	Numerator: Number of incomplete pathways within 18 weeks	Denominator: Total number of incomplete pathways
Indicator type	z-scored	
Assessment of risk	Risk is determined through z-score analysis using the national average for acute trusts as the expected value.	
	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/07/2014 to 31/07/2014	
Data source	NHS England www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/	

Indicator ID	DIAG6WK01	
Indicator description	Diagnostics waiting times: patients waiting over 6 weeks for a diagnostic test	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Numerator: Number of patients waiting more than 6 weeks for a diagnostic test	Denominator: Total number of patients waiting

Indicator type	z-scored	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/07/2014 to 31/07/2014	
Data source	NHS England www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/	

Indicator ID	WT_CAN26	
Indicator	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	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Numerator: 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	Denominator: The total number of patients receiving their first definitive treatment for cancer following an urgent GP or dentist referral for suspected cancer
Indicator type	z-scored	
Assessment of risk	Goal value set at 85% (As recommended by Department of Health) www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/05/Cancer-Waiting-Times-commentary-Q4-2012-13-commissioner-based-data.pdf	
	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/04/2014 to 30/06/2014	
Data source	NHS England www.england.nhs.uk/statistics/statistical-work-areas/cancer-waiting-times/	

Indicator ID	WT_CAN27	
Indicator	The proportion of patients receiving their first definitive treatment for cancer within two months (62 days) of urgent referral from the national screening service	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Numerator: The number of patients receiving their first definitive treatment for cancer within two months (62 days) of urgent referral from the national screening service	Denominator: The total number of patients receiving their first definitive treatment for cancer following an urgent referral from the national screening service
Indicator type	z-scored	
Assessment of risk	Goal value set at 90% (As recommended by Department of Health) www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/05/Cancer-Waiting-Times-commentary-Q4-2012-13-commissioner-based-data.pdf	
	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/04/2014 to 30/06/2014	
Data source	NHS England www.england.nhs.uk/statistics/statistical-work-areas/cancer-waiting-times/	

Indicator ID	WT_CAN22	
Indicator	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	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Numerator: 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	Denominator: The total number of patients receiving their first definitive treatment for cancer
Indicator type	z-scored	
Assessment of risk	Goal value set at 96% (As recommended by Department of Health) www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/05/Cancer-Waiting-Times-commentary-Q4-2012-13-commissioner-based-data.pdf	
	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/04/2014 to 30/06/2014	
Data source	NHS England www.england.nhs.uk/statistics/statistical-work-areas/cancer-waiting-times/	

Indicator ID	CND_OPS01
Indicator	Proportion of patients not treated within 28 days of last minute cancellation due to non-clinical reason
Rationale	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

Change to indicator?	NO	
Indicator construction	Numerator: Number of patients not treated within 28 days of last minute cancellation	Denominator: Number of last minute cancellations for non-clinical reasons in the time period
Indicator type	z-scored	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/04/2014 to 30/06/2014	
Data source	NHS England www.england.nhs.uk/statistics/statistical-work-areas/cancelled-elective-operations/	

Indicator ID	CND_OPS02	
Indicator	The proportion of patients whose operation was cancelled	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Numerator: Number of last minute cancellations for non-clinical reasons in the time period	Denominator: The total number of general and acute first finished consultant episodes (FFCEs) for elective activity (inpatient ordinary and day case admissions)
Indicator type	z-scored	

Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/04/2014 to 30/06/2014	
Data source	NHS England Numerator: www.england.nhs.uk/statistics/statistical-work-areas/cancelled-elective-operations/ Denominator: http://www.england.nhs.uk/statistics/statistical-work-areas/hospital-activity/monthly-hospital-activity/	

Indicator ID	AMBTURN06	
Indicator	The proportion of ambulance journeys where the ambulance vehicle remained at hospital for more than 60 minutes	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Numerator: Number of ambulance vehicles remaining at hospital for more than 60 minutes	Denominator: Total number of ambulance vehicle journeys
Indicator type	z-scored	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/04/2014 to 30/04/2014	
Data source	NHS Ambulance Service – Protected data which is sent directly to CQC	

Discharge and Integration

Indicator ID	DTC40	
Indicator	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	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Numerator: The total number of days delayed over the quarter where the delay is attributable to the NHS	Denominator: The total number of occupied beds in the quarter
Indicator type	z-scored	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/04/2014 to 30/06/2014	
Data source	Numerator: NHS England www.england.nhs.uk/statistics/statistical-work-areas/delayed-transfers-of-care/	Denominator: KH03 http://www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and-occupancy/bed-data-overnight/ and non-consultant led bed figures (sent direct to CQC)

Reporting Culture

Indicator ID	NRLSL08	
Indicator	Consistency of reporting to the National Reporting and Learning System (NRLS)	
Rationale	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	
Change to indicator?	Yes	
Indicator construction	Numerator: Number of months in which data reported to the NRLS	Denominator: Total number of months
Indicator type	Categorical or Ordinal (z-scored)	
Assessment of risk	Risk: Trusts with 3 or 4 months of reporting out of 6 months	Elevated risk: Trusts with 0, 1 or 2 months of reporting out of 6 months
Time period	01/10/2013 to 31/03/2014	
Data source	NHS Commissioning Board (National Reporting and Learning System) http://www.nrls.npsa.nhs.uk/resources/type/data-reports/	

Indicator ID	COM_SUSDAQ	
Indicator	Data Quality of Trust Returns to the HSCIC	
Rationale	Accuracy of trust data returns is an Indirect measure of trust training, policy and practice relating to records management	
Change to indicator?	No	

Indicator construction	<p>Data quality of trust returns to the HSCIC is assessed separately for Inpatients, Outpatients and for Accident and Emergency records. Valid data fields are analysed as percentage correct data submission, by category: A&E (SUSA&E02), Outpatients (SUSOP02) and Inpatients (SUSAPC02). Please see statistical methodology for specific numeration/denominator details. Z-score analysis is conducted using the mean percentage correct value for each category</p> <p>The final risk level takes calculated z-scores into account using a rule-based system (see 'Assessment of risk' row below). This approach prevents data quality issues in inpatient or A&E records being swamped by the much larger number of records in outpatients</p>
Indicator type	Final risk level derived from proportional z-scores for all three data categories using a rules-based system
Assessment of risk	<p>1) Proportional z-scores are calculated for each of the three data categories</p> <p>2) A risk score rating for each data category is assigned using the following criteria:</p> <ul style="list-style-type: none"> • No evidence of risk: Z-score <2.0 • Risk: Z-score ≥2.0 and <3.0 • Elevated risk: Z-score ≥3.0 <p>3) Weighting applied to risk ratings for each of the specialties:</p> <ul style="list-style-type: none"> • No evidence of risk: 0 • Risk: 1 • Elevated risk: 2 <p>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</p> <p>Intelligent monitoring NHS acute hospitals: Indicators and methodology v1 Page 57</p> <p>4) The trust level risk rating is calculated using the following:</p> <p>a) Where data is available for A&E, inpatients and outpatients: Sum (risk ratings generated for all service areas) / (number of services with data available x 2)</p> <ul style="list-style-type: none"> • No evidence of risk: where this result is <0.3

	<ul style="list-style-type: none"> • Risk: where this result is ≥ 0.3 and < 0.5 • Elevated risk: where this result is ≥ 0.5 <p>b) Where data is available for inpatients and outpatients only: Sum (risk ratings generated for all service areas) / (number of services with data available x 2)</p> <ul style="list-style-type: none"> • No evidence of risk: where this result is < 0.5 • Risk: where this result is ≥ 0.5 and < 0.75 • Elevated risk: where this result is ≥ 0.75
Time-period	01/04/2014 to 31/05/2014
Data source	Health and Social Care Information Centre (HSCIC) – Protected data which is sent directly to CQC

Indicator ID	FFTResp02	
Indicator	NHS England Inpatients response rate from Friends and Family Test	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Response rate: Total trust-level respondents from April 2013 to March 2014 inclusive, divided by total trust-level eligible patients from April 2013 to March 2014 inclusive	
Indicator type	z-scored	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/8/2013 to 31/07/2014	
Data source	Friends and Family Test (FFT) www.england.nhs.uk/statistics/statistical-work-areas/friends-and-family-test/friends-and-family-test-data	

Partners

Indicator ID	MONITOR01	
Indicator	Monitor risk rating for governance	
Rationale	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.	
Change to indicator?	NO	
Indicator construction	Numerator: n/a	Denominator: n/a
Indicator type	Categorical or Ordinal (z-scored)	
Assessment of risk	Risk: Monitor risk rating: currently under investigation	Elevated risk: Monitor risk rating: Subject to enforcement action
Time period	as at 09/09/2014	
Data source	Monitor risk rating: http://www.monitor.gov.uk/about-your-local-nhs-foundation-trust/nhs-foundation-trust-performance/actual-performance/risk-ratings Monitor regulatory action: http://www.monitor.gov.uk/about-your-local-nhs-foundation-trust/regulatory-action/action-were-taking-nhs-foundation-trusts	

Indicator ID	MONITOR02	
Indicator	Monitor - Continuity of service rating	
Rationale	Formal continuity of service rating supplied by an external Healthcare regulatory body. Monitor assesses trust governance on the following five-point scale of: 1: significant risk 2: material risk 2*: level of risk is material but stable 3: emerging or minor concern	

	4: no evident concerns	
Change to indicator?	New indicator	
Indicator construction	Numerator: n/a	Denominator: n/a
Indicator type	Categorical or Ordinal (z-scored)	
Assessment of risk	Risk: 2: material risk	Elevated risk: 1: significant risk
Time period	as at 09/09/2014	
Data source	Monitor risk rating: http://www.monitor.gov.uk/about-your-local-nhs-foundation-trust/nhs-foundation-trust-performance/actual-performance/risk-ratings	
Notes	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.	

Indicator ID	TDA03	
Indicator	NHS Trust Development Authority risk rating for governance	
Rationale	This is a formal governance risk rating supplied by an external regulatory body. NHS TDA assesses trust governance on the following 5 point scale: 1 Special measures 2 Intervention (significant delivery issues) 3 Intervention (some delivery issues) 4 Standard oversight (limited/ no delivery issues) 5 Standard oversight (good or outstanding rating)	
Change to indicator?	Yes	
Indicator construction	Numerator: n/a	Denominator: n/a
Indicator type	Categorical or Ordinal (z-scored)	

Assessment of risk	Risk: 2 Intervention (significant delivery issues)	Elevated Risk: 1 Special measures
Time period	01/06/2014 to 30/06/2014	
Data source	NHS TDA – Protected data which is sent directly to CQC	

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

Staff Surveys

Indicator ID	STASURBG01
Indicator	NHS Staff Survey – The proportion of staff who would recommend the trust as a place to work or receive treatment
Rationale	Staff feedback with regards to their work environment and how their trust is performing is an indicator of how the trust is functioning
Change to	NO

indicator?		
Indicator construction	Numerator: Number of staff who would recommend the trust as a place to work or receive treatment	Denominator: Number of respondents
Indicator type	z-scored	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 2 but less than 3
Time period	01/09/2013 to 31/12/2013	
Data source	Department of Health (NHS Staff Survey) http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2013-Results/	

Indicator ID	NHSSTAFF04	
Indicator	NHS Staff Survey – KF7. The proportion of staff who were appraised in last 12 months	
Rationale	<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>	
Change to indicator?	NO	
Indicator construction	Numerator: Number of staff appraised in last 12 months	Denominator: Number of respondents
Indicator type	z-scored	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/09/2013 to 31/12/2013	

Data source	Department of Health (NHS Staff Survey) http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2013-Results
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Indicator ID	NHSSTAFF06	
Indicator	NHS Staff Survey – KF9. The proportion of staff reported receiving support from immediate managers	
Rationale	<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>	
Change to indicator?	NO	
Indicator construction	Numerator: Number of staff reporting that they have received support from immediate managers	Denominator: Number of respondents
Indicator type	z-scored	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/09/2013 to 31/12/2013	
Data source	Department of Health (NHS Staff Survey) http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2013-Results/	

Indicator ID	NHSSTAFF07	
Indicator	NHS Staff Survey – KF10. The proportion of staff receiving health and safety training in last 12 months	
Rationale	The staff pledges, part of the NHS Constitution, define what the NHS	

	<p>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>	
Change to indicator?	NO	
Indicator construction	Numerator: Number of staff receiving health and safety training in last 12 months	Denominator: Number of respondents
Indicator type	z-scored	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/09/2013 to 31/12/2013	
Data source	Department of Health (NHS Staff Survey) http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2013-Results/	

Indicator ID	NHSSTAFF11	
Indicator	NHS Staff Survey – KF15. The proportion of staff who stated that the incident reporting procedure was fair and effective	
Rationale	<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>	
Change to indicator?	NO	
Indicator	Numerator:	Denominator:

construction	Number of staff who reported that they felt the incident reporting procedures are fair and effective	Number of respondents
Indicator type	z-scored	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/09/2013 to 31/12/2013	
Data source	Department of Health (NHS Staff Survey) http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2013-Results/	

Indicator ID	NHSSTAFF16	
Indicator	NHS Staff Survey – KF21. The proportion of staff reporting good communication between senior management and staff	
Rationale	<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>	
Change to indicator?	NO	
Indicator construction	Numerator: Number of staff reporting good communication between senior management and staff	Denominator: Number of respondents
Indicator type	z-scored	
Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated risk: z-score greater than or equal to 3
Time period	01/09/2013 to 31/12/2013	

Data source	Department of Health (NHS Staff Survey) http://www.nhsstaffsurveys.com/Page/1006/Latest-Results/2013-Results/
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Staffing

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	
Change to indicator?	NO	
Indicator construction	<p>Staff sickness rates are assessed separately for each of the following four staff groups:</p> <ul style="list-style-type: none"> i) Medical and dental staff ii) Nursing and midwifery staff iii) Other clinical staff iv) Non-clinical staff <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"> v) Stress vi) Back problems <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>	
	Numerator: Number of days sick	Denominator: 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	<p>i) Proportional z-scores calculated for each of the four broad categories of registrable 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"> • No evidence of risk: Z-score <2.0 • Risk: z-score: ≥2.0 but <3.0 • Elevated risk: z-score ≥3.0 <p>iii) Weighting applied to risk score for each of the items:</p> <ul style="list-style-type: none"> • No evidence of risk: 0 • Risk: 1 • Elevated risk: 2 <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"> • Risk: Greater than 0.1 and less than 0.5 • Elevated risk: Greater than or equal to 0.5
Time period	01/08/2013 to 31/07/2014
Data source	Electronic Staff Record Data Warehouse

Indicator ID	ESRReg
Indicator	Composite risk rating of ESR items relating to staff registration
Rationale	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

	<p>professional staff. In particular:</p> <ul style="list-style-type: none"> 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. ii) Nurses and midwives cannot legally practise in the UK unless they are registered with the Nursing and Midwifery Council. 	
Change to indicator?	YES	
Indicator construction	<p>Completeness of professional registration details held by trusts is assessed separately for each of the four groups listed in the previous row. A proportional data z-score is calculated for each of the four 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>	
	<p>Numerator: Headcount of staff that hold a valid professional registration</p>	<p>Denominator: Headcount of staff in with job titles that require professional registration</p>
Indicator type	Final risk level derived using a rules-based system from proportional z-scores for all four categories of professional staff	
Assessment of risk	<p>Proportional z-scores calculated for each of the four broad categories of registrable staff listed above.</p> <ul style="list-style-type: none"> i) A risk score for each of the items is assigned using the following criteria: ii) Weighting applied to risk score for each of the items: <ul style="list-style-type: none"> • No evidence of risk: 0 • Risk: 1 • Elevated risk: 2 iii) The aggregate risk weighting is calculated for each of the four <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> iv) The aggregate risk weighting is calculated for each of the professional groups listed using the following rules: 	

	<p>([Sum of risk score for all professional groups per organisation]/ [maximum possible risk score for all professional groups per organisation])</p> <ul style="list-style-type: none"> • Risk: Greater than 0.2 and less than 0.5 • Elevated risk: Greater than or equal to 0.5
Time period	01/08/2013 to 31/07/2014
Data source	Electronic Staff Record Data Warehouse

Indicator ID	ESRTO	
Indicator	Staff turnover rate (NHS Electronic Staff Record data)	
Rationale	<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"> i) Medical and dental staff ii) Nursing and midwifery staff iii) Other clinical staff iv) Non-clinical staff 	
Change to indicator?	YES	
Indicator construction	Numerator: Number of leavers in the last 12 months	Denominator: Average headcount over the last 12 months
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	Proportional z-scores calculated for each of the four broad categories of registrable staff listed above	

	<p>i) A risk score for each of the items is assigned using the following criteria:</p> <ul style="list-style-type: none"> • No evidence of risk: Z-score <2.0 • Risk: z-score: ≥2.0 but <3.0 • Elevated risk: z-score ≥3.0 <p>ii) Weighting applied to risk score for each of the items:</p> <ul style="list-style-type: none"> • No evidence of risk: 0 • Risk: 1 • Elevated risk: 2 <p>iii) The aggregate risk weighting is calculated for each of the four <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]/ [maximum possible risk score for all professional groups per organisation])</p> <ul style="list-style-type: none"> • Risk: Greater than 0.2 and less than 0.5 • Elevated risk: Greater than or equal to 0.5
Time period	01/08/2013 to 31/07/2014
Data source	Electronic Staff Record Data Warehouse

Indicator ID	ESRSTAB
Indicator	Composite risk rating of ESR items relating to staff stability (Proportion of staff who have >1year's service)
Rationale	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 ESRTTO (Staff Turnover)
Change to	YES

indicator?		
Indicator construction	<p>A stability index is calculated separately for each of the following four staff groups:</p> <ul style="list-style-type: none"> i) Medical and dental staff ii) Nursing and midwifery staff iii) Other clinical staff iv) Non-clinical staff <p>A proportional data 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 three occupational groups listed above. The effect of Transfer of Undertakings (Protection of Employment) is excluded.</p>	
	Numerator: Number of employees (headcount) with greater than 12 months service	Denominator: Number of employees (headcount) 12 months ago
Indicator type	Final risk level derived using a rules-based system from proportional z-scores for all four staff categories listed above	
Assessment of risk	<ul style="list-style-type: none"> i) Proportional z-scores calculated for the stability of each of the four broad categories of staff listed above ii) A risk score for each of the items is assigned using the following criteria: <ul style="list-style-type: none"> • No evidence of risk: Z-score <2.0 • Risk: z-score ≥2.0 but <3.0 • Elevated risk: z-score ≥3.0 iii) Weighting applied to risk score for each of the items: <ul style="list-style-type: none"> • No evidence of risk: 0 • Risk: 1 • Elevated risk: 2 <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</i></p>	

	<p><i>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]/ [maximum possible risk score for all professional groups per organisation])</p> <ul style="list-style-type: none"> • Risk: Greater than 0.2 and less than 0.5 • Elevated risk: Greater than or equal to 0.5
Time period	01/08/2013 to 31/07/2014
Data source	Electronic Staff Record Data Warehouse

Indicator ID	ESRSUP
Indicator	Composite risk rating of ESR items relating to staff support/ supervision
Rationale	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
Change to indicator?	NO
Indicator construction	<p>Separate ratios are calculated for the following five important supervisory relationships in acute hospital settings:</p> <ul style="list-style-type: none"> i) (Band 6 nurse) : (Band 5 nurse) ii) (Charge nurse/ ward sister) : (Band 5/6 nurse) iii) Proportion of all ward staff who are registered nurses iv) (Consultant doctors) : (Non-consultant doctors) v) (Midwife Supervisors) : (Midwives) <p>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</p>

	senior and junior staff in other occupational groups
Indicator type	Final risk level derived using a rules-based system from proportional z-scores for all five of the staff ratios listed above
Assessment of risk	<p>i) Proportional 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) No evidence of risk: Z-score <2.0</p> <p>iv) Risk: z-score ≥2.0 but <3.0</p> <p>v) Elevated risk: z-score ≥3.0</p> <p>vi) Weighting applied to risk score for each of the items:</p> <ul style="list-style-type: none"> • No evidence of risk: 0 • Risk: 1 • Elevated risk: 2 <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]/ [maximum possible risk score for all professional groups per organisation])</p> <ul style="list-style-type: none"> • Risk: Greater than 0.1 and less than 0.5 • Elevated risk: Greater than or equal to 0.5
Time period	01/08/2013 to 31/07/2014
Data source	Electronic Staff Record Data Warehouse

Indicator ID	ESRSTAFF
Indicator	Composite risk rating of ESR items relating to ratio: Staff vs. bed occupancy

Rationale	Adequate staff: patient ratios across all occupational groups are essential to adequate patient care	
Change to indicator?	YES	
Indicator construction	<p>Four ratios covering different types of staff-patient relationship are calculated:</p> <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>	
	<p>Ratio Count 1:</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>Ratio Count 2:</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>
Indicator type	Final risk level derived using a rules-based system from proportional z-scores for all four ratios listed above in 'Rationale'	
Assessment of risk	<p>i) Proportional 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"> • No evidence of risk: Z-score <2.0 • Risk: z-score ≥2.0 but <3.0 	

	<ul style="list-style-type: none"> • Elevated risk: z-score ≥ 3.0 <p>iii) Weighting applied to risk score for each of the items:</p> <ul style="list-style-type: none"> • No evidence of risk: 0 • Risk: 1 • Elevated risk: 2 <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]/ [maximum possible risk score for all professional groups per organisation])</p> <ul style="list-style-type: none"> • Risk: Greater than 0.1 and less than 0.5 • Elevated risk: Greater than or equal to 0.5
Time period	<p>ESR data time period: 01/08/2013 to 31/07/2014</p> <p>Birth data time period: 01/05/2013 to 30/04/2014</p> <p>Bed occupancy data time period: 01/07/2013 to 30/06/2014</p>
Data source	Electronic Staff Record Data Warehouse

Indicator ID	FLUVAC01	
Indicator	Proportion of Health Care Workers (HCW) with direct patient care that have been vaccinated against seasonal influenza	
Rationale	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	
Change to indicator?	NO	
Indicator construction	Numerator: Total number of HCW who received vaccine	Denominator: Total number of HCW employed by trust
Indicator type	z-scored	

Assessment of risk	Risk: z-score greater than or equal to 2 but less than 3	Elevated Risk: z-score greater than or equal to 2 but less than 3
Time period	01/09/2013 to 31/01/2014	
Data source	Department of Health https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/319682/2902502_FluVaccineUptake_HCWs_2013-14_acc.pdf	

Qualitative Intelligence

Indicator ID	WHISTLEBLOW
Indicator	CQC National Customer Service Centre qualified Whistleblowing alerts
Indicator construction	Counts of alerts
Rationale	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
Change to indicator?	No
Indicator type	Count of alerts
Assessment of risk	Elevated risk: One or more open alerts
Time period	18/07/2013 to 29/09/2014
Data source	Care Quality Commission (internal data)

Indicator ID	GMC
Indicator	GMC - Enhanced monitoring
Rationale	GMC monitoring information is important as when considered with other information it can provide a fuller picture of the provider's performance.
Change to indicator?	NO

Indicator construction	Count of entries	
Indicator type	Count of entries	
Assessment of risk	Risk: 1 or more entries where the GMC is status is not Closed or Concerns Over Progress	Elevated risk: 1 or more entries where the GMC status notes Concerns Over Progress
Time-period	01/03/2009 to 22/07/2014	
Data source	Data supplied by the General Medical Council (GMC) based on information published by the GMC at http://www.gmc-uk.org/education/enhanced_monitoring.asp	

Indicator ID	SAFEGUARDING	
Indicator	CQC's National Customer Service Centre (NCSC) safeguarding concerns	
Rationale	It's important to take safeguarding concerns received about a provider seriously as safeguarding is a very serious matter that needs to be monitored	
Change to indicator?	YES	
Indicator construction	Counts of concerns adjusted by bed days. Bed days may be partly estimated when their availability does not cover the full time period indicated below.	
Indicator type	p-value	
Assessment of risk	Risk: P-value ≤ 0.01 after Elevated Risk trusts omitted from analysis	Elevated Risk: P-value ≤ 0.01 and iterative global P-value ≤ 0.20
Time-period	23/09/2013 to 22/09/2014	
Data source	Care Quality Commission (internal data)	

Indicator ID	SYE	
Indicator	Share your experience negative comments	
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	
Change to indicator?	YES	
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	Risk: P-value ≤ 0.01 after Elevated Risk trusts omitted from analysis	Elevated Risk: P-value ≤ 0.01 and iterative global P-value ≤ 0.20
Time-period	09/09/2013 to 08/09/2014	
Data source	Care Quality Commission – Comments submitted directly to CQC	

Indicator ID	NHSCHOICES	
Indicator	NHS Choices negative comments	
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	
Change to indicator?	YES	
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	Risk: P-value ≤ 0.01 after Elevated Risk trusts omitted from analysis	Elevated Risk: P-value ≤ 0.01 and iterative global P-value ≤ 0.20
Time-period	01/05/2013 to 30/04/2014	
Data source	NHS Choices – Protected data which is sent directly to CQC from external	

	bodies
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Indicator ID	P_OPINION	
Indicator	Patient opinion – negative comments	
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	
Change to indicator?	YES	
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	Risk: P-value ≤ 0.01 after Elevated Risk trusts omitted from analysis	Elevated Risk: P-value ≤ 0.01 and iterative global P-value ≤ 0.20
Time-period	28/05/2013 to 27/05/2014	
Data source	Patient Opinion – Protected data which is sent directly to CQC from external bodies	

Indicator ID	CQC_COM	
Indicator	CQC complaints	
Rationale	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	
Change to indicator?	YES	
Indicator construction	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.	
Indicator type	p-value	

Assessment of risk	Risk: P-value ≤ 0.01 after Elevated Risk trusts omitted from analysis	Elevated Risk: P-value ≤ 0.01 and iterative global P-value ≤ 0.20
Time-period	23/09/2013 to 22/09/2014	
Data source	Care Quality Commission (internal data)	

Indicator ID	PROV_COM	
Indicator	Provider complaints	
Rationale	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	
Change to indicator?	YES	
Indicator construction	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.	
Indicator type	p-value	
Assessment of risk	Risk: P-value ≤ 0.01 after Elevated Risk trusts omitted from analysis	Elevated Risk: P-value ≤ 0.01 and iterative global P-value ≤ 0.20
Time-period	01/04/2013 to 31/03/2014	
Data source	HSCIC - NHS written data complaints http://www.hscic.gov.uk/article/2021/Website-Search?productid=15261&q=complaints+data&sort=Relevance&size=10&page=1&area=both#top	

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.

First Finished Consultant Episode (FFCE): the first completed episode of a patient's stay in hospital.

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

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

NHS Counter Fraud and Security Management Service (NHS CFSMS): develops strategies for improving security in the NHS, implements policies on protecting NHS resources from fraud.

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 Maternity Survey: this is survey of women who have recently given birth to ask about their experiences of antenatal care, childbirth and postnatal care. This is part of a national programme to improve quality of care and women's experiences.

NHS Operating Framework 2012/13: sets out the business and planning arrangements for the NHS

www.gov.uk/government/uploads/system/uploads/attachment_data/file/216590/dh_131428.pdf

NHS Operating Framework 2009/10:

www.connectingforhealth.nhs.uk/systemsandservices/infogov/links/opframework20092010.pdf

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.

Hospital Standardised Mortality Ratio (HSMR)	
Metric	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.
Denominator	Spells with a primary dominant diagnosis of any of the 56 CCS groups that comprise the HSMR basket (see Appendix A ¹ for the list of CCS diagnosis groups within the HSMR basket), linked into superspells ¹ .
Observed	<p>Denominator superspells with method of discharge as death (DISMETH=4,5).</p> <p>Deaths are assigned to every provider within the superspell.</p>
Expected	Expected number of in-hospital deaths derived from logistic regression, adjusting for factors to indirectly standardise for differences in case-mix.
Data Sources	SUS – CDS for the period April 2013 – March 2014.

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:

- o Sex
- o Age on admission (in five year bands up to 90+)
- o Interactions between age on admission (in five year bands up to 90+) and Charlson co-morbidity score
- o Admission method (non-elective or elective)
- o Socio-economic deprivation quintile of the area of residence of the patient (based on the Carstairs Index)
- o Diagnosis/procedure subgroup
- o Co-morbidities (based on Charlson score)
- o Number of previous emergency admissions

- o Year of discharge (rolling 12 month)
 - o 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)
 - o Month of admission
 - o 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.

¹ Superspell: a group of spells linked by transfer

Deaths in Low-Risk Diagnosis Groups (PSI)
<p>Metric</p> <p>Deaths per 1000 spells for conditions normally associated with a very low rate of mortality.</p>
<p>Denominator</p> <p>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 H).</p> <p>Exclusions:</p> <ul style="list-style-type: none"> • 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 E: Immunocompromised state • See Appendix F: Cancer codes • See Appendix G: Trauma codes
<p>Numerator</p> <p>Denominator spells with method of discharge as death.</p> <p><i>DISMETH:</i></p> <p>4 Died</p>
<p>Data Source</p> <p>SUS – CDS for the period April 2013 – March 2014.</p>

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'.

HSMR for Emergency Admissions (Weekday)	
Metric 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.	
Denominator 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 ¹ . Emergency admissions are defined using the following ADMIMETH codes: <ul style="list-style-type: none"> 21 Emergency: via Accident and Emergency (A&E) services, including the casualty department of the provider 22 Emergency: via general practitioner (GP) 23 Emergency: via Bed Bureau, including the Central Bureau 24 Emergency: via consultant outpatient clinic 28 Emergency: other means, including patients who arrive via the A&E department of another healthcare provider 	
Observed Denominator superspells with method of discharge as death (DISMETH=4,5). Deaths are assigned to every provider within the superspell.	
Expected The expected number of in-hospital deaths derived from logistic regression, adjusting for factors to indirectly standardise for differences in case-mix.	
Data Source SUS – CDS for the period April 2013 – March 2014.	

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:

- o Sex
 - o Age on admission (in five year bands up to 90+)
 - o Interactions between age on admission (in five year bands up to 90+) and Charlson co-morbidity score
 - o Admission method (non-elective or elective)
 - o Socio-economic deprivation quintile of the area of residence of the patient (based on the Carstairs Index)
 - o Diagnosis/procedure subgroup
 - o Co-morbidities (based on Charlson score)
 - o Number of previous emergency admissions
 - o Year of discharge (rolling 12 month)
 - o 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)
 - o Month of admission
 - o 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'.

¹ 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.

HSMR for Emergency Admissions (Weekend)	
Metric	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.
Denominator	<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 superspells¹.</p> <p>Emergency admissions are defined using the following ADMIMETH codes:</p> <ul style="list-style-type: none"> 21 Emergency: via Accident and Emergency (A&E) services, including the casualty department of the provider 22 Emergency: via general practitioner (GP) 23 Emergency: via Bed Bureau, including the Central Bureau 24 Emergency: via consultant outpatient clinic 28 Emergency: other means, including patients who arrive via the A&E department of another healthcare provider
Observed	<p>Denominator superspells with method of discharge as death (DISMETH=4,5).</p> <p>Deaths are assigned to every provider within the superspell.</p>
Expected	The expected number of in-hospital deaths derived from logistic regression, adjusting for factors to indirectly standardise for differences in case-mix.
Data Source	SUS – CDS for the period April 2013 – March 2014.
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 from July 2003:

¹ Superspell: a group of spells linked by transfer

- o Sex
 - o Age on admission (in five year bands up to 90+)
 - o Interactions between age on admission (in five year bands up to 90+) and Charlson co-morbidity score
 - o Admission method (non-elective or elective)
 - o Socio-economic deprivation quintile of the area of residence of the patient (based on the Carstairs Index)
 - o Diagnosis/procedure subgroup
 - o Co-morbidities (based on Charlson score)
 - o Number of previous emergency admissions
 - o Year of discharge (rolling 12 month)
 - o 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)
 - o Month of admission
 - o 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 A: 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/vomit
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 E: 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 F: Cancer code

ICD Code	Description
B21	Human immunodeficiency virus disease resulting in malignant neoplasms
Whole C chapter	
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
D00-D09	Carcinomata-in-situ
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 G: 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 H: 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	Z032,Z133,Z865

	for mental condition	
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-N434,N44,N46,N47,N480,N481,N483-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-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-O264,O266-O269,O28,O31,O860-O863,O98,O99
182	Haemorrhage during	O20,O44-O67

	pregnancy, abruption of placenta, placenta previa	
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

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

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Dermatology conditions

CCS diagnosis group	
197	Skin and subcutaneous tissue infections
198	Other inflammatory condition of skin
199	Chronic ulcer of skin
200	Other skin disorders
240	Burns

Endocrinology conditions

CCS diagnosis group	
48	Thyroid disorders
49	Diabetes mellitus without complication
50	Diabetes mellitus with complications
51	Other endocrine disorders
52	Nutritional deficiencies
53	Disorders of lipid metabolism
54	Gout and other crystal arthropathies
55	Fluid and electrolyte disorders
58	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	
59	Deficiency and other anaemia
60	Acute posthaemorrhagic anaemia
61	Sickle cell anaemia
62	Coagulation and hemorrhagic disorders
63	Diseases of white blood cells'
64	Other hematologic conditions

Infectious diseases

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

Conditions associated with mental health

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

Musculoskeletal conditions

CCS diagnosis group	
201	Infective arthritis and osteomyelitis (except that caused by tuberculosis or

	sexually transmitted disease)
202	Rheumatoid arthritis and related disease
203	Osteoarthritis
204	Other non-traumatic joint disorders
205	Spondylosis; intervertebral disc disorders; other back problems
206	Osteoporosis
207	Pathological fracture
212	Other bone disease and musculoskeletal deformities

Nephrology conditions

CCS diagnosis group	
156	Nephritis; nephrosis; renal sclerosis
157	Acute and unspecified renal failure
158	Chronic renal failure
161	Other diseases of kidney and ureters

Neurology conditions

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

Paediatric and Congenital disorders

CCS diagnosis group	
213	Cardiac and circulatory congenital anomalies
214	Digestive congenital anomalies
215	Genitourinary congenital anomalies
216	Nervous system congenital anomalies
217	Other congenital anomalies
218	Liveborn

219	Short gestation; low birth weight; and fetal growth retardation
220	Intrauterine hypoxia and birth asphyxia
221	Respiratory distress syndrome
222	Haemolytic jaundice and perinatal jaundice
223	Birth trauma
224	Other perinatal conditions

Respiratory conditions

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

Conditions relating to Trauma and Orthopaedics

CCS diagnosis group	
225	Joint disorders and dislocations; trauma-related
226	Fracture of neck of femur (hip)
227	Spinal cord injury
228	Skull and face fractures
229	Fracture of upper limb
230	Fracture of lower limb
231	Other fractures

232	Sprains and strains
233	Intracranial injury
234	Crushing injury or internal injury
235	Open wounds of head; neck; and trunk
236	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 19 November 2014.

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.

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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.

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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)

Indicator ID	CASIM01A01
Indicator	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
Rationale	This indicator highlights how many CAS alerts with closing dates in the 12 months preceding download remained open.
Change to indicator?	NEW
Indicator construction	CAS alerts that have breached stipulated closing date in the 12 months preceding data download which are still open
Indicator type	Categorical rules based
Assessment of risk	A risk score rating for each data category is assigned using the following criteria: Elevated risk: 5 or more open alerts Risk: Between 1 and 4 open alerts
Time period	01/09/2013 to 31/08/2014
Data source	Central Alerting System https://www.cas.dh.gov.uk/Home.aspx

Indicator ID	CASIM01B01
Indicator	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
Rationale	This indicator identifies the minority of trusts which still have CAS alerts open for extraordinarily long periods after their stipulated closing date
Change to indicator?	NEW
Indicator construction	CAS alerts which are still open 12 months or more after the stipulated closing date on the date of download
Indicator type	Categorical rules based
Assessment	A risk score rating for each data category is assigned using the following

of risk	criteria: Elevated risk: 2 or more open alerts Risk: 1 open alert
Time period	01/04/2004 to 31/08/2013
Data source	Central Alerting System https://www.cas.dh.gov.uk/Home.aspx

Indicator ID	CASIM01C01
Indicator	Percentage of CAS alerts with closing dates during the preceding 12 months which the trust has closed late
Rationale	This indicator gives an overall picture of trusts' timeliness in closing alerts.
Change to indicator?	NEW
Indicator construction	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
Indicator type	Categorical rules based
Assessment of risk	A risk score rating for each data category is assigned using the following criteria: Elevated risk: 50% or more alerts closed after the stipulated closing date Risk: 25% or more, but less than 50%, of alerts closed after the stipulated closing date
Time period	01/09/2013 to 31/08/2014
Data source	Central Alerting System https://www.cas.dh.gov.uk/Home.aspx