

Intelligent Monitoring Report

Report on

University Hospitals Birmingham NHS Foundation Trust

21 October 2013 (Revised)

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? The indicators will be used to raise questions about the quality of care. They will not be used on their own to make judgements. Our judgements will always be based on the result of an inspection, which will take into account our Intelligent Monitoring analysis alongside local information from the public, the trust and other organisations.

What does this report contain?

This report presents CQC's analysis of the key indicators (which we call 'tier one indicators') for University Hospitals Birmingham NHS Foundation Trust. We have analysed each indicator to identify two possible levels of risk.

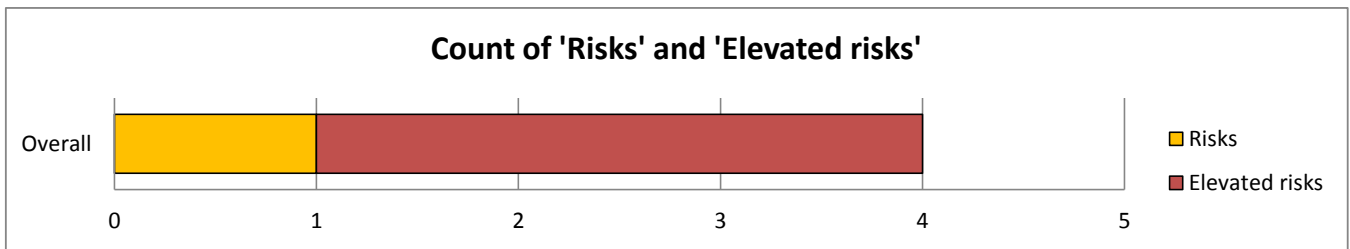
We have used a number of statistical tests to determine where the thresholds of "risk" and "elevated risk" sit for each indicator, based on our judgement of which statistical tests are most appropriate. These tests include CUSUM and z scoring techniques. For some data sources we have applied a set of rules to the data as the basis for these thresholds - for example concerns raised by staff to CQC (and validated by CQC) are always flagged in the model.

Further details of the analysis applied are explained in the accompanying guidance document.

What guidance is available?

We have published a document setting out the definition and full methodology for each indicator. If you have any queries or need more information, please email enquiries@cqc.org.uk or use the contact details at www.cqc.org.uk/contact-us

Trust Summary



Band	3
Number of 'Risks'	1
Number of 'Elevated risks'	3
Overall Risk Score	7
Number of Applicable Indicators	77
Proportional Score	4.55%
Maximum Possible Risk Score	154

Elevated risk	Dr. Foster: Deaths in low risk diagnosis groups
Elevated risk	Dr. Foster: Composite of Hospital Standardised Mortality Ratio indicators
Elevated risk	Composite indicator: In-hospital mortality - Trauma and orthopaedic conditions and procedures
Risk	Healthcare Worker Flu vaccination uptake

Tier One Indicators

Section	ID	Indicators	Observed	Expected	Risk?
Never Events	STEISNE	Never Event incidence	-	-	No evidence of risk
Avoidable infections	CDIFF	Incidence of Clostridium difficile (C.difficile)	71	58.4	No evidence of risk
	MRSA	Incidence of Meticillin-resistant Staphylococcus aureus (MRSA)	4	4.16	No evidence of risk
Deaths in low risk diagnosis groups	MORTLOWR	Dr. Foster: Deaths in low risk diagnosis groups	-	-	Elevated risk
Patient safety incidents	NRLSL03	Proportion of reported patient safety incidents that are harmful	0.24	0.28	No evidence of risk
	NRLSL04	Potential under-reporting of patient safety incidents resulting in death or severe harm	1.24	1.49	No evidence of risk
	NRLSL05	Potential under-reporting of patient safety incidents	239.3	235.27	No evidence of risk
Venous Thromboembolism	VTERA03	Proportion of patients risk assessed for Venous Thromboembolism (VTE)	0.99	0.95	No evidence of risk
Mortality: Trust Level	SHMI01	Summary Hospital-level Mortality Indicator	Trust's mortality rate is 'As Expected'	-	No evidence of risk
	COM_HSMR	Dr. Foster: Composite of Hospital Standardised Mortality Ratio indicators	-	-	Elevated risk
Mortality	COM_CARDI	Composite indicator: In-hospital mortality - Cardiological conditions and procedures	-	-	No evidence of risk
	COM_CEREB	Composite indicator: In-hospital mortality - Cerebrovascular conditions	-	-	No evidence of risk
	COM_DERMA	Composite indicator: In-hospital mortality - Dermatological conditions	-	-	No evidence of risk
	COM_ENDOC	Composite indicator: In-hospital mortality - Endocrinological conditions	-	-	No evidence of risk
	COM_GASTR	Composite indicator: In-hospital mortality - Gastroenterological and hepatological conditions and procedures	-	-	No evidence of risk
	COM_GENIT	Composite indicator: In-hospital mortality - Genito-urinary conditions	-	-	No evidence of risk
	COM_HAEMA	Composite indicator: In-hospital mortality - Haematological conditions	-	-	No evidence of risk
	COM_INFEC	Composite indicator: In-hospital mortality - Infectious diseases	-	-	No evidence of risk
	COM_MENTA	Composite indicator: In-hospital mortality - Conditions associated with Mental health	-	-	No evidence of risk
	COM_MUSCU	Composite indicator: In-hospital mortality - Musculoskeletal conditions	-	-	No evidence of risk
	COM_NEPHR	Composite indicator: In-hospital mortality - Nephrological conditions	-	-	No evidence of risk
	COM_NEURO	Composite indicator: In-hospital mortality - Neurological conditions	-	-	No evidence of risk
	COM_PAEDI	Composite indicator: In-hospital mortality - Paediatric and congenital disorders and perinatal mortality	-	-	No evidence of risk
	COM_RESPI	Composite indicator: In-hospital mortality - Respiratory conditions and procedures	-	-	No evidence of risk
	COM_TRAUM	Composite indicator: In-hospital mortality - Trauma and orthopaedic conditions and procedures	-	-	Elevated risk
COM_VASCU	Composite indicator: In-hospital mortality - Vascular conditions and procedures	-	-	No evidence of risk	

Section	ID	Indicators	Observed	Expected	Risk?
Maternity and women's health	MATELECCS	Maternity outlier alert: Elective Caesarean section	Not included	Not included	Not included
	MATEMERCs	Maternity outlier alert: Emergency Caesarean section	Not included	Not included	Not included
	MATSEPSIS	Maternity outlier alert: Puerperal sepsis and other puerperal infections	Not included	Not included	Not included
Re-admissions	MATMATRE	Maternity outlier alert: Maternal readmissions	Not included	Not included	Not included
	MATNEORE	Maternity outlier alert: Neonatal readmissions	Not included	Not included	Not included
	HESELRE	Emergency readmissions following an elective admission	1255	1120.47	No evidence of risk
	HESEMRE	Emergency readmissions following an emergency admission	3878	3985.33	No evidence of risk
PROMs	PROMS19	PROMs EQ-5D score: Groin Hernia Surgery	1.04	1	No evidence of risk
	PROMS20	PROMs EQ-5D score: Hip Replacement	Not included	Not included	Not included
	PROMS22	PROMs EQ-5D score: Knee Replacement	Not included	Not included	Not included
	PROMS24	PROMs EQ-5D score: Varicose Vein Surgery	Not included	Not included	Not included
Audit	NHFD01	The number of cases assessed as achieving compliance with all nine standards of care measured within the National Hip Fracture Database.	0.63	0.6	No evidence of risk
	SINAP14	Key Indicator 1: Number of patients scanned within 1 hour of arrival at hospital	Not included	Not included	Not included
	SINAP15	Key Indicator 8: Number of potentially eligible patients thrombolysed	Not included	Not included	Not included
Surgical revisions outlier	SURGHIPREV	Surgical revisions outlier alert: Hip revisions	Not included	Not included	Not included
	SURGKNEREV	Surgical revisions outlier alert: Knee revisions	Not included	Not included	Not included
Compassionate care	IPSurTalkWor	Inpatient Survey 2012 Q34 "Did you find someone on the hospital staff to talk to about your worries and fears?"	6.36	-	No evidence of risk
	IPSurSupEmot	Inpatient Survey 2012 Q35 "Do you feel you got enough emotional support from hospital staff during your stay?"	7.71	-	No evidence of risk
Meeting physical needs	IPSurHelpEat	Inpatient Survey 2012 Q23 "Did you get enough help from staff to eat your meals?"	7.89	-	No evidence of risk
	IPSurInvDeci	Inpatient Survey 2012 Q32 "Were you involved as much as you wanted to be in decisions about your care and treatment?"	7.52	-	No evidence of risk
	IPSurCntPain	Inpatient Survey 2012 Q39 "Do you think the hospital staff did everything they could to help control your pain?"	8.02	-	No evidence of risk
Overall experience	IPSurOverall	Inpatient Survey 2012 Q68 "Overall..." (I had a very poor/good experience)	8.16	-	No evidence of risk
	FFTNHSEscore	NHS England inpatients score from Friends and Family Test	78.76	-	No evidence of risk
Treatment with dignity and respect	IPSurRspDign	Inpatient Survey 2012 Q67 "Overall, did you feel you were treated with respect and dignity while you were in the hospital?"	8.94	-	No evidence of risk
Trusting relationships	IPSurConfDoc	Inpatient Survey 2012 Q25 "Did you have confidence and trust in the doctors treating you?"	9.19	-	No evidence of risk
	IPSurConfNur	Inpatient Survey 2012 Q28 "Did you have confidence and trust in the nurses treating you?"	8.87	-	No evidence of risk

Section	ID	Indicators	Observed	Expected	Risk?
Access measures	AD_A&E12	A&E waiting times more than 4 hours	0.05	0.05	No evidence of risk
	RTT_01	Referral to treatment times under 18 weeks: admitted pathway	0.9	0.9	No evidence of risk
	RTT_02	Referral to treatment times under 18 weeks: non-admitted pathway	0.97	0.95	No evidence of risk
	DIAG6WK01	Diagnostics waiting times: patients waiting over 6 weeks for a diagnostic test	0	0.01	No evidence of risk
	WT_CAN26	All cancers: 62 day wait for first treatment from urgent GP referral	0.86	0.85	No evidence of risk
	WT_CAN27	All cancers: 62 day wait for first treatment from NHS cancer screening referral	1	0.9	No evidence of risk
	WT_CAN22	All cancers: 31 day wait from diagnosis	0.97	0.96	No evidence of risk
	CND_OPS02	The proportion of patients whose operation was cancelled	0.01	0.01	No evidence of risk
	CND_OPS01	The number of patients not treated within 28 days of last minute cancellation due to non-clinical reason	0	0.07	No evidence of risk
AMBTURN06	Proportion of ambulance journeys where the ambulance vehicle remained at hospital for more than 60 minutes	0.01	0.02	No evidence of risk	
Discharge and Integration	DTC40	Ratio of the total number of days delay in transfer from hospital to the total number of occupied beds	0.02	0.02	No evidence of risk
Reporting culture	NRLS14	Consistency of reporting to the National Reporting and Learning System (NRLS)	6 months of reporting	-	No evidence of risk
	SUSDQ	Data quality of trust returns to the HSCIC	-	-	No evidence of risk
	FFTRESP02	Inpatients response rate from NHS England Friends and Family Test	0.31	0.26	No evidence of risk
Partners	MONITOR01	Monitor - Governance risk rating	Amber - red	-	No evidence of risk
	TDA01	TDA - Escalation score	Not included	Not included	Not included
	NTS12	GMC National Training Survey – Trainee's overall satisfaction	Within Q2/IQR	-	No evidence of risk
Staff survey	STASURBG01	NHS Staff Survey - Percentage of staff who would recommend the trust as a place to work or receive treatment	0.73	0.64	No evidence of risk
	NHSSTAFF04	NHS Staff Survey - KF7. % staff appraised in last 12 months	0.83	0.82	No evidence of risk
	NHSSTAFF06	NHS Staff Survey - KF9. Support from immediate managers	0.65	0.65	No evidence of risk
	NHSSTAFF07	NHS Staff Survey - KF10. % staff receiving health and safety training in last 12 months	0.72	0.74	No evidence of risk
	NHSSTAFF11	NHS Staff Survey - KF15. Fairness and effectiveness of incident reporting procedures	0.62	0.63	No evidence of risk
	NHSSTAFF16	NHS Staff Survey - KF21. % reporting good communication between senior management and staff	0.33	0.27	No evidence of risk

Section	ID	Indicators	Observed	Expected	Risk?
Staffing	ESRSIC	Composite risk rating of ESR items relating to staff sickness rates	-	-	No evidence of risk
	ESRReg	Composite risk rating of ESR items relating to staff registration	-	-	No evidence of risk
	ESRTO	Composite risk rating of ESR items relating to staff turnover	-	-	No evidence of risk
	ESRSTAB	Composite risk rating of ESR items relating to staff stability	-	-	No evidence of risk
	ESRSUP	Composite risk rating of ESR items relating to staff support/ supervision	-	-	No evidence of risk
	ESRSTAFF	Composite risk rating of ESR items relating to ratio: Staff vs bed occupancy	-	-	No evidence of risk
	FLUVAC01	Healthcare Worker Flu vaccination uptake	0.23	0.48	Risk
Qualitative intelligence	WHISTLEBLOW	Whistleblowing alerts	-	-	No evidence of risk
	GMCconcerns	GMC - Serious Education Concerns	-	-	No evidence of risk
	Safeguarding	Safeguarding concerns	-	-	No evidence of risk
	SYE	CQC - Share Your Experience	2	-	No evidence of risk
	NHSchoices	NHS Choices	14	-	No evidence of risk
	P_OPINION	Patient Opinion	12	-	No evidence of risk
	CQC_COM	CQC complaints	13	-	No evidence of risk
PROV_COM	Provider complaints	752	-	No evidence of risk	

Appendix of indicators used in the composite mortality indicators

Section	ID	Indicators	Risk?
Dr. Foster: Hospital Standardised Mortality Ratio	HSMR	Dr. Foster: Hospital Standardised Mortality Ratio	Elevated risk
	HSMRWKDAY	Dr. Foster: Hospital Standardised Mortality Ratio (Weekday)	Elevated risk
	HSMRWKEND	Dr. Foster: Hospital Standardised Mortality Ratio (Weekend)	No evidence of risk
Cardiological Conditions and Procedures	HESMORT24CU	In-hospital mortality: Cardiological conditions	No evidence of risk
	MORTAMI	Mortality outlier alert: Acute myocardial infarction	No evidence of risk
	MORTARRES	Mortality outlier alert: Cardiac arrest and ventricular fibrillation	No evidence of risk
	MORTCABGI	Mortality outlier alert: CABG (isolated first time)	No evidence of risk
	MORTCABGO	Mortality outlier alert: CABG (other)	No evidence of risk
	MORTCASUR	Mortality outlier alert: Adult cardiac surgery	No evidence of risk
	MORTCATH	Mortality outlier alert: Coronary atherosclerosis and other heart disease	No evidence of risk
	MORTCHF	Mortality outlier alert: Congestive heart failure; nonhypertensive	No evidence of risk
	MORTDYSRH	Mortality outlier alert: Cardiac dysrhythmias	No evidence of risk
	MORTHVD	Mortality outlier alert: Heart valve disorders	No evidence of risk
MORTPHD	Mortality outlier alert: Pulmonary heart disease	No evidence of risk	
Cerebrovascular Conditions	HESMORT21CU	In-hospital mortality: Cerebrovascular conditions	No evidence of risk
	MORTACD	Mortality outlier alert: Acute cerebrovascular disease	No evidence of risk
Dermatological Conditions	HESMORT35CU	In-hospital mortality: Dermatological conditions	No evidence of risk
	MORTSKINF	Mortality outlier alert: Skin and subcutaneous tissue infections	No evidence of risk
	MORTSKULC	Mortality outlier alert: Chronic ulcer of skin	No evidence of risk
Endocrinological Conditions	HESMORT29CU	In-hospital mortality: Endocrinological conditions	No evidence of risk
	MORTDIABWC	Mortality outlier alert: Diabetes mellitus with complications	No evidence of risk
	MORTDIABWOC	Mortality outlier alert: Diabetes mellitus without complications	No evidence of risk
	MORTFLUID	Mortality outlier alert: Fluid and electrolyte disorders	No evidence of risk

Section	ID	Indicators	Risk?
Gastroenterological and Hepatological Conditions and Procedures	HESMORT27CU	In-hospital mortality: Gastroenterological and hepatological conditions	No evidence of risk
	MORTALCLIV	Mortality outlier alert: Liver disease, alcohol-related	No evidence of risk
	MORTBILIA	Mortality outlier alert: Biliary tract disease	No evidence of risk
	MORTGASHAE	Mortality outlier alert: Gastrointestinal haemorrhage	No evidence of risk
	MORTGASN	Mortality outlier alert: Noninfectious gastroenteritis	No evidence of risk
	MORTINTOBS	Mortality outlier alert: Intestinal obstruction without hernia	No evidence of risk
	MORTOGAS	Mortality outlier alert: Other gastrointestinal disorders	No evidence of risk
	MORTOLIV	Mortality outlier alert: Other liver diseases	No evidence of risk
	MORTOPJJEJ	Mortality outlier alert: Operations on jejunum	No evidence of risk
	MORTPERI	Mortality outlier alert: Peritonitis and intestinal abscess	No evidence of risk
	MORTTEPBI	Mortality outlier alert: Therapeutic endoscopic procedures on biliary tract	No evidence of risk
	MORTTEPLGI	Mortality outlier alert: Therapeutic endoscopic procedures on lower GI tract	No evidence of risk
	MORTTEPUGI	Mortality outlier alert: Therapeutic endoscopic procedures on upper GI tract	No evidence of risk
MORTTOJI	Mortality outlier alert: Therapeutic operations on jejunum and ileum	No evidence of risk	
Genito-Urinary Conditions	HESMORT31CU	In-hospital mortality: Genito-urinary conditions	No evidence of risk
	MORTUTI	Mortality outlier alert: Urinary tract infections	No evidence of risk
Haematological Conditions	HESMORT28CU	In-hospital mortality: Haematological conditions	No evidence of risk
	MORTDEFI	Mortality outlier alert: Deficiency and other anaemia	No evidence of risk
Infectious Diseases	HESMORT26CU	In-hospital mortality: Infectious diseases	No evidence of risk
	MORTSEPT	Mortality outlier alert: Septicaemia (except in labour)	No evidence of risk
Conditions Associated With Mental Health	HESMORT33CU	In-hospital mortality: Conditions associated with Mental health	Not included
	MORTSENI	Mortality outlier alert: Senility and organic mental disorders	No evidence of risk
Musculoskeletal Conditions	HESMORT36CU	In-hospital mortality: Musculoskeletal conditions	No evidence of risk
	MORTPATH	Mortality outlier alert: Pathological fracture	No evidence of risk
	MORTSPON	Mortality outlier alert: Spondylosis, intervertebral disc disorders, other back problems	No evidence of risk

Section	ID	Indicators	Risk?
Nephrological Conditions	HESMORT30CU	In-hospital mortality: Nephrological conditions	No evidence of risk
	MORTRENA	Mortality outlier alert: Acute and unspecified renal failure	No evidence of risk
	MORTRENC	Mortality outlier alert: Chronic renal failure	No evidence of risk
Neurological Conditions	HESMORT34CU	In-hospital mortality: Neurological conditions	No evidence of risk
	MORTEPIL	Mortality outlier alert: Epilepsy, convulsions	No evidence of risk
Paediatric and Congenital Disorders and Perinatal Mortality	HESMORT32CU	In-hospital mortality: Paediatric and congenital disorders	No evidence of risk
	MATPERIMOR	Maternity outlier alert: Perinatal mortality	Not included
Respiratory Conditions and Procedures	HESMORT25CU	In-hospital mortality: Respiratory conditions	No evidence of risk
	MORTASTHM	Mortality outlier alert: Asthma	No evidence of risk
	MORTBRONC	Mortality outlier alert: Acute bronchitis	No evidence of risk
	MORTCOPD	Mortality outlier alert: Chronic obstructive pulmonary disease and bronchiectasis	No evidence of risk
	MORTPLEU	Mortality outlier alert: Pleurisy, pneumothorax, pulmonary collapse	No evidence of risk
MORTPNEU	Mortality outlier alert: Pneumonia	No evidence of risk	
Trauma and Orthopaedic Conditions	HESMORT37CU	In-hospital mortality: Trauma and orthopaedic conditions	No evidence of risk
	MORTCRAN	Mortality outlier alert: Craniotomy for trauma	No evidence of risk
	MORTFNOF	Mortality outlier alert: Fracture of neck of femur (hip)	No evidence of risk
	MORTHFREP	Mortality outlier alert: Head of femur replacement	No evidence of risk
	MORTHIPREP	Mortality outlier alert: Hip replacement	No evidence of risk
	MORTINTINJ	Mortality outlier alert: Intracranial injury	Elevated risk
	MORTOFRA	Mortality outlier alert: Other fractures	No evidence of risk
	MORTREDFB	Mortality outlier alert: Reduction of fracture of bone	No evidence of risk
	MORTREDFBL	Mortality outlier alert: Reduction of fracture of bone (upper/lower limb)	No evidence of risk
	MORTREDFNOF	Mortality outlier alert: Reduction of fracture of neck of femur	No evidence of risk
MORTSHUN	Mortality outlier alert: Shunting for hydrocephalus	No evidence of risk	

Section	ID	Indicators	Risk?
Vascular Conditions and Procedures	HESMORT23CU	In-hospital mortality: Vascular conditions	No evidence of risk
	MORTAMPUT	Mortality outlier alert: Amputation of leg	No evidence of risk
	MORTANEUR	Mortality outlier alert: Aortic, peripheral, and visceral artery aneurysms	No evidence of risk
	MORTCLIP	Mortality outlier alert: Clip and coil aneurysms	No evidence of risk
	MORTOFB	Mortality outlier alert: Other femoral bypass	No evidence of risk
	MORTPVA	Mortality outlier alert: Peripheral and visceral atherosclerosis	No evidence of risk
	MORTREPAAA	Mortality outlier alert: Repair of abdominal aortic aneurysm (AAA)	No evidence of risk
	MORTTOFA	Mortality outlier alert: Transluminal operations on the femoral artery	No evidence of risk