### University Hospitals **NHS** Birmingham

NHS Foundation Trust



## **Quality Account Update**

for Quarter 3 2016/17 (October - December)

## Contents

	Introduction	-	4
2.	Quality Im	provement Priorities	5
	Priority 1.	Reducing grade 2 hospital-acquired avoidable pressure ulcers	5
	-		5
	2	Improve patient experience and satisfaction	(
	Priority 3:	Timely and complete observations including pain assessment	15
	Priority 4:	Reducing medication errors (missed doses)	18
	Priority 5:	Infection prevention and control	20
3.	Mortality		23
4.	Selected r	netrics	
	Patient safe	ety indicators	25
Cli	nical effectiv	veness indicators	39

# **1. Introduction**

The Trust published its seventh Quality Account Report in June 2016 as part of the Annual Report and Accounts. The report contained an overview of the quality initiatives undertaken in 2015/16, performance data for selected metrics and set out five priorities for improvement during 2016/17:

- Priority 1: Reducing grade 2 hospital-acquired avoidable pressure ulcers
- **Priority 2:** Improve patient experience and satisfaction
- Priority 3: Timely and complete observations including pain assessment
- **Priority 4:** Reducing medication errors (missed doses)
- **Priority 5:** Infection prevention and control

This report provides an update on the progress made for the period October to December 2016 towards meeting these priorities and updated performance data for the selected metrics. This update report should be read alongside the Trust's Quality Account Report for 2015/16.

# **2. Quality Improvement Priorities**

### Priority 1: Reduce grade 2 hospital-acquired pressure ulcers

#### Background

This quality improvement priority was proposed by the Council of Governors and approved by the Board of Directors for 2015/16.

Pressure ulcers are caused when an area of skin and the tissues below are damaged as a result of being placed under pressure sufficient to impair its blood supply (NICE, 2014). They are also known as "bedsores" or "pressure sores" and they tend to affect people with health conditions that make it difficult to move, especially those confined to lying in a bed or sitting for prolonged periods of time. Some pressure ulcers also develop due to pressure from a device, such as a urinary catheter.

Pressure ulcers are painful, may lead to chronic wound development and can have a significant impact on a patient's recovery from ill health and their quality of life. They are graded from 1 to 4 depending on their severity, with grade 4 being the most severe:

Grade	Description
1	Skin is intact but appears discoloured. The area may be painful, firm, soft, warmer or cooler than adjacent tissue.
2	Partial loss of the dermis (deeper skin layer) resulting in a shallow ulcer with a pink wound bed, though it may also resemble a blister.
3	Skin loss occurs throughout the entire thickness of the skin, although the underlying muscle and bone are not exposed or damaged. The ulcer appears as a cavity-like wound; the depth can vary depending on where it is located on the body.
4	The skin is severely damaged, and the underlying muscles, tendon or bone may also be visible and damaged. People with grade 4 pressure ulcers have a high risk of developing a life-threatening infection.

(National Pressure Ulcer Advisory Panel, 2014)

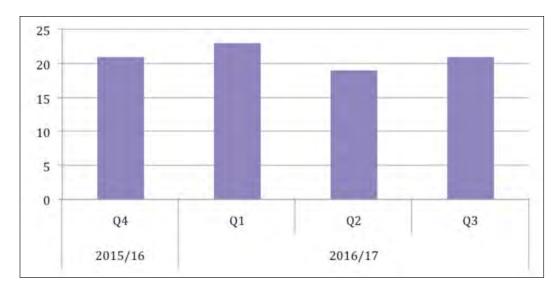
At UHB, pressure ulcers are split into two groups: those caused by medical devices and those that are not.

UHB saw a continued decrease in the number of hospital-acquired pressure ulcers during 2015/16. As there are now fewer hospital-acquired grade 3 and grade 4 ulcers at UHB, the Trust has chosen to focus on reducing grade 2 ulcers. This in turn should reduce the number of grade 3 and grade 4 ulcers, as grade 2 ulcers will be less likely to progress.

#### Performance

The 2016/17 reduction target agreed with Birmingham CrossCity Clinical Commissioning Group (CCG) is 125 patients with non device-related, hospital-acquired avoidable grade 2 pressure ulcers. This is a reduction of 5% on the target set for the previous year 2015/16 (132).

In Quarter 3 2016/17, UHB reported 21 patients with this kind of ulcer, giving a total of 63 in 2016/17 to date. This compares to 79 for 2015/16 as a whole, and 144 in 2014/15.



# Number of patients with grade 2 hospital-acquired, non device-related avoidable pressure ulcers, by Quarter

#### Initiatives to be implemented during 2016/17

To continue to build on the improvements seen in 2015/16, to further identify any common causes or reasons behind hospital-acquired pressure ulcers and to target training and resources accordingly.

#### How progress will be monitored, measured and reported:

- All grade 2, 3 and 4 pressure ulcers are reported via the Trust's incident reporting system Datix, and then reviewed by a Tissue Viability Specialist Nurse.
- Monthly reports are submitted to the Trust's Pressure Ulcer Action Group, which reports to the Chief Nurse's Care Quality Group.
- Data on pressure ulcers also forms part of the Clinical Risk report to the Clinical Quality Monitoring Group.
- Staff can monitor the number and severity of pressure ulcers on their ward via the Clinical Dashboard.

### Priority 2: Improve patient experience and satisfaction

The Trust measures patient experience via feedback received in a variety of ways, including local and national patient surveys, the NHS Friends and Family Test, complaints and compliments and online sources (e.g. NHS Choices). This vital feedback is used to make improvements to our services. This priority focuses on improving scores in our local surveys.

#### Patient experience data from surveys

During Quarter 3 2016/17, 3,221 patient responses were received to our local inpatient survey, 202 to the Emergency Department survey, 366 to the outpatient survey\* and 277 responses to our discharge survey\*.

\*2 months of data only due to postal time lag.

#### Methodology

The local inpatient survey is undertaken, predominantly, utilising our bedside TV system, allowing patients to participate in surveys at their leisure. Areas that do not have the bedside TVs use either paper or tablets for local surveys. The Emergency Department survey is a paper-based survey, and the outpatient and discharge surveys are postal – both sent to a sample of 500 patients per month. Results of the postal surveys have been provided up to November 2016 as that is the latest data available at the time of compiling this report.

#### Improvement target for 2016/17

For 2016/17 we reviewed 2015/16 performance for the questions set for this priority. Where these achieved or maintained their target during the year they were replaced with new questions. Where we have not quite achieved the targets set in 2015/16, these questions continue to be included in this priority for 2016/17. New questions were chosen based on feedback we receive from patients about what really matters to them. Some of the new questions were already included on our surveys so have a baseline based on 2015/16 performance, some are new so will have either had baselines set in Quarter 1 or Quarter 2. The exception to this are the targets for the new questions implemented for the Emergency Department. This data is still settling and is fluctuating month by month and by quarter; proposed targets have been set and will be reviewed at the end of Quarter 4 when it should be easier to set realistic targets.

- Questions carried forward targets carried forward from 2015/16.
- New questions with a 2015/16 baseline:
  - Questions scoring 9 or above in 2015/16 are to maintain a score of 9 or above.
  - Questions scoring below 9 in 2015/16 are to increase performance by at least 5%, and/or achieve a score of 9.
- New questions with no 2015/16 baseline are to have a baseline set based on performance in Quarter 1 or 2 2016/17. The above criteria will then apply.

#### The table below shows the results for 2016/17 for each question.

	Score	Q1 Score	Q2 Score	Q3 Score	Target	No. of responses
Inpatient survey	2015/16			2016/	<b>'17</b>	
<ol> <li>Did you find someone on the hospital staff to talk about your worries or fears?</li> </ol>	8.5	8.6	8.8	8.9	8.8	3716
2. Do you think that the ward staff do all they can to help you rest and sleep at night?	8.9	8.8	9.1	9.1	9.0	4912
3. Have you been bothered by noise at night from hospital staff?	8.3	8.5	8.8	8.5	8.5	4750
4. Sometimes in hospital a member of staff says one thing and another says something quite different. Has this happened to you?	8.8	8.8	8.8	8.8	9.0	10311
5. During your time in hospital did you feel well looked after by hospital staff?*	N/A	9.3	9.5	9.6	9.0	3920
Outpatient survey**						
6. How would you rate the courtesy of the reception staff during your time in the Outpatients Department?*	8.9	8.8	8.9	8.7	9.0	1544**
7. Did the staff treating and examining you introduce themselves?	8.8	8.8	8.7	8.9	8.9	1507**
8. If you had important questions to ask the doctor, did you get answers that you could understand?*	8.9	8.9	8.8	8.7	9.0	1383**
Emergency Department survey***						
9. During your time in the Emergency Department did you feel well looked after by hospital staff?*	N/A	Not	8.9	8.3	8.9*	341
10. How would you rate the courtesy of the Emergency Department reception staff?*	N/A	Not asked in Q1	8.6	8.2	8.7*	310
11. Were you kept informed of what was happening at all stages during your visit?*	N/A		8.2	7.5	8.0*	338
Discharge survey**						
12. Did a member of staff tell you about medication side effects to watch for when you went home?	5.7	5.9	6.0	6.1	6.1	1041**
13. Did you feel you were involved in decisions about going home from hospital?	7.2	7.1	7.1	7.5	7.4	1325**

\*New quality priority questions for 2016/17 - proposed targets set \*\*Data up to November (partial).

#### How progress will be monitored, measured and reported

- This priority is measured using the local survey results as detailed in the methodology.
- The operational Patient Experience Group (reporting to the Care Quality Group) monitors this priority.
- Exception reports to Associate Directors of Nursing (ADNs) highlight individual wards not meeting the quality priority so that action can be taken. The new reporting format requires the ADNs to provide feedback on actions taken to the Care Quality Group.
- This patient experience quality priority is reported on the Clinical Dashboard (also available in the Patient Experience section of the intranet) so is always available for staff to view; updated monthly.
- Quarterly patient experience reports will be provided to the Care Quality Group (summarised to the Board of Directors) and the local Clinical Commissioning Group this includes a gap analysis on the patient experience quality priority.
- Feedback will be provided by members of the Patient and Carer Councils as part of the Adopt a Ward / Department visits and via Governor drop-in sessions.
- Progress will also be reported via the quarterly Quality Report update published on the Trust Quality web pages.

#### **Friends and Family Question**

Response rates and positive recommendation percentages continue to be closely monitored throughout Quarter 3 2016/17 against internal targets set and tracked against national and regional averages to benchmark how we are doing against our peers.

The Friends and Family Test (FFT) asks patients the following question:

# "How likely are you to recommend our (ward / emergency department / service) to friends and family if they needed similar care or treatment?"

Patients asked the question could choose from six different responses as follows:

- Extremely likely
- Likely
- Neither likely or unlikely
- Unlikely
- Not at all
- Don't know

#### Methodology

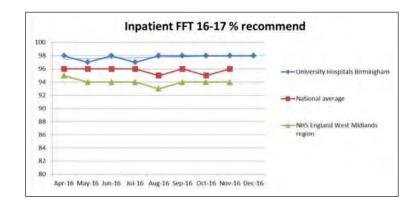
Patients admitted as day cases, or staying overnight on an inpatient ward, were asked to complete the FFT on discharge from hospital; either on the bedside TVs, on paper or tablet. Those attending the emergency department were asked either on leaving (using a paper survey), or afterwards via an SMS text message. Outpatients are given the opportunity to answer the question whenever suits them best, either before they leave the department (paper or check in kiosk), or they can access the question online via the Trust website.

The Trust follows the national guidance for undertaking and scoring of the Friends and Family Test.

#### Performance

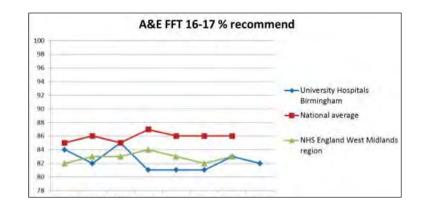
The charts below show benchmark comparisons for the positive recommendation percentages for the Friends and Family Test for Inpatients, Accident & & Emergency and Outpatients. NB: Regional and national average data for December 2016 has not yet been published.

**Inpatients:** During Quarter 3 2016/17 the Trust has sustained its position (at the time of reporting) above both the regional and national averages for inpatients

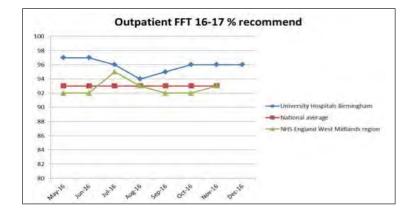


#### Accident & Emergency (A&E):

The Trust's A&E FFT result has either matched or sat just below the regional average whilst remaining below the current national average result for Quarter 3 2016/17.



#### **Outpatients**: The Trust's Outpatient FFT result has increased and remained stable in Quarter 3 after a dip in Quarter 2. It remains consistently higher than both the regional and national averages.



#### Compliments

Compliments are recorded by the Patient Advice and Liaison Service (PALS), and also by the Patient Experience Team. PALS record any compliments they receive directly from patients and carers. The Patient Experience Team collates and records compliments received via all other sources; this includes those sent to the Chief Executive's office, the Patient Experience Team email address, the Trust website and those sent to wards and departments. Where compliments are included in complaints or customer care award nominations they are also extracted and logged as such.

The majority of compliments are received in writing – by letter, card, email, website contact or Trust feedback leaflet, the rest are received verbally via telephone or face to face. Positive feedback is shared with staff and patients to promote and celebrate good practice as well as to boost staff morale.

UHB consistently receives considerably more compliments than it does complaints. The Patient Experience team provide support and guidance to divisional staff around the collation and recording of compliments received directly to wards and departments.

Compliment subcategories	2014/15	2015/16	2016/17 Q1	2016/17 Q2	2016/17 Q3
Nursing care	242	579	54	40	60
Friendliness of staff	142	84	24	15	28
Treatment received	1,743	1,290	372	389	370
Medical care	56	83	19	13	24
Other	17	24	4	5	4
Efficiency of service	104	268	104	74	52
Information provided	12	15	6	4	4
Facilities	12	6	2	0	0
Total	2,328	2,349	585	540	542

#### Examples of compliments received during Quarter 3 2016/7

Month received	Compliment
October 2016	After being admitted to A&E, my husband had the most wonderfully fast- tracked, competent and excellent care we have ever experienced. The staff were wonderful in their attention to us both and the physical surroundings and resources at their disposal seem fantastic.
November 2016	Well organised; short waiting times with efficient service; informative staff and very friendly. Very pleasant experience for someone who doesn't like hospitals, clinic is well run and all questions are answered well
December 2016	The staff and nurses have been really understanding and brilliant; they have shown no judgment, just pure devotion and care. A massive thank you from me and a massive thank you to your professional nursing staff and doctors.

#### Complaints

In Quarter 3 2016/17, a total of 177 complaints were received, an increase of 2 cases on the 175 complaints received in Quarter 2.

The main subjects of all complaints received in Quarter 3 2016/17 were principally related to clinical treatment (33), followed by staff attitude (30) and communication (29), the same top 3 subjects as in Quarter 2.

In Quarter 3 2016/17, we have seen an increase in the ratio of complaints to activity for Inpatients, a stable ratio in Outpatients, whilst in the Emergency Department the ratio decreased compared to Quarter 2.

	2015/16	2016/17 Q1	2016/17 Q2	2016/17 Q3
Total number of formal complaints	680	203	175	177

Ratio of form	Ratio of formal complaints to activity		2016/17 Q1	2016/17 Q2	2016/17 Q3
Inpatients	FCEs*	129,574	33,040	33,455	33,760
	Complaints	345	95	75	84
	Rate per 1000 FCEs	2.7	2.9	2.2	2.5
Outpatients	Appointments**	788,996	196,418	199,279	198,391
	Complaints	245	84	65	68
	Rate per 1000 appointments	0.3	0.4	0.3	0.3
Emergency	Attendances	108,463	28,851	29,004	28,946
Department	Complaints	90	24	35	25
	Rate per 1000 attendances	0.8	0.8	1.2	0.9

\* FCE = Finished Consultant Episode – which denotes the time spent by a patient under the continuous care of a consultant \*\* Outpatients activity data relates to fulfilled appointments only and also includes Therapies (Physiotherapy, Podiatry, Dietetics, Speech & Language Therapy and Occupational Therapy).

#### Learning from complaints

The Trust takes a number of steps to review learning from complaints and to take action as necessary. Related actions and learning from individual complaints are shared with the complainant

in the Trust's written response or at the local resolution meeting where appropriate. All actions from individual complaints are captured on the Complaints database. Regular reports are sent to each clinical division's senior management team with details of every complaint for their division with actions attached; highlighting any of those cases where any of the agreed actions remain outstanding. Reports are shared at several Trust meetings including Divisional Clinical Quality Groups, Clinical Quality Committee, Care Quality Group and Chief Executive's Advisory Group meeting. The Head of Patient Experience has been developing a sharing and learning tool which incorporates learning from PALS contacts, complaints, patient experience feedback, incidents and learning from excellence. Once the format has been finalised, this will be communicated across the Trust to ensure key learning from feedback is shared.

#### **Serious Complaints**

The Trust uses a risk matrix to assess the seriousness of every complaint on receipt. Those deemed most serious, which score either 4 or 5 for consequence on a 5 point scale, are highlighted separately across the Trust. The number of serious complaints is reported to the Chief Executive's Advisory Group and detailed analysis of the cases and the subsequent investigation and related actions are presented to the Divisional Management Teams at their Divisional Clinical Quality Group meetings. It is the Divisional Management Teams' responsibility to ensure that, following investigation of the complaint, appropriate actions are put in place to ensure that learning takes place and that every effort is made to prevent a recurrence of the situation or issue which triggered the complaint being considered serious

PHSO involvement	2015/16	2016/17 Q1	2016/17 Q2	2016/17 Q3
Cases referred to PHSO by complainant for investigation	28	7	7	6
Cases which were then referred back to the Trust for further local resolution	0	0	0	0
Cases which were not upheld following review by the PHSO	6	4	2	2
Cases which were partially upheld following review by the PHSO	11	5	1	4
Cases which were fully upheld following review by the PHSO	2	0	0	0

The total number of cases referred to the Ombudsman for assessment, agreed for investigation and ultimately upheld or partially upheld remains relatively low in proportion to the overall level of complaints received by the Trust. Four cases were partially upheld by the Ombudsman in Quarter 3 2016/17.

#### Initiatives to be implemented in 2016/17

- Continued review and updating of the patient experience dashboard and reporting processes.
- Implement the use of patient stories as a feedback and training mechanism.
- Review of how patient experience data is monitored and used to drive improvements.
- Using a more focused project-based approach to tackle challenging aspects of the patient experience.
- Finalisation of the plans to implement an internal buggy system.
- Scope the potential implementation of therapeutic visits from trained and approved volunteers with pets.
- Increase number of guest beds to allow carers to stay overnight.
- Pilot a new ward booklet to give patients and visitors improved information.
- Additional wheelchairs for patient use.
- Implement updated survey system on bedside TVs to include free text comments.
- Review of complaints process to streamline and improve response time.
- Refresh the Friends and Family Test in outpatients to increase response rate.
- Implement new Learning from Complaints report to share learning Trust-wide.

### Priority 3: Timely and complete observations including pain assessment

#### Background

All inpatient wards have been recording patient observations (temperature, blood pressure, oxygen saturation score, respiratory rate, pulse rate and level of consciousness) electronically since 2011. The observations are recorded within the Prescribing Information and Communication System (PICS).

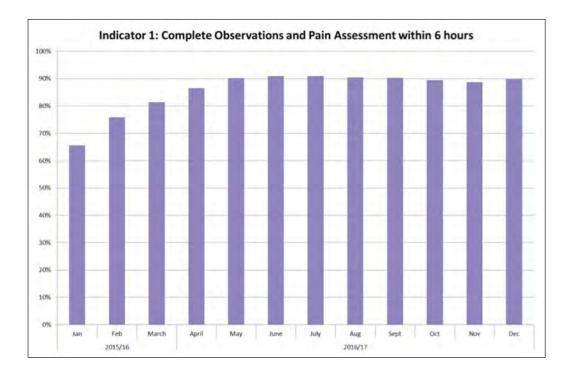
When nursing staff carry out patient observations, it is important that they complete the full set of observations. This is because the electronic tool automatically triggers an early warning score called the SEWS (Standardised Early Warning System) score if a patient's condition starts to deteriorate. This allows patients to receive appropriate clinical treatment as soon as possible.

For 2015/16 the Board of Directors chose to tighten the timeframe for completeness of observation sets to within 6 hours of admission or transfer to a ward and to include a pain assessment.

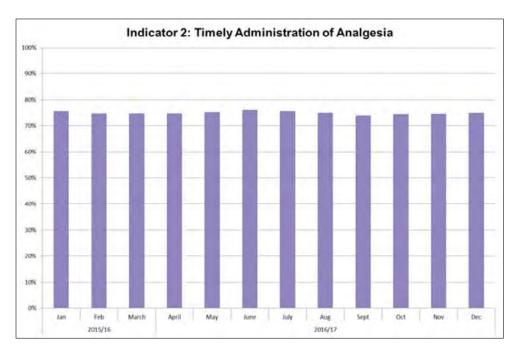
In addition, the Trust is monitoring the timeliness of analgesia (pain relief medication) following a high pain score. Whenever a patient scores 7 or above, they should be given analgesia within 30 minutes. The indicator also includes patients who are given analgesia within the 60 minutes prior to a high pain score to allow time for the medication to work.

#### Performance

Challenging and ambitious improvement targets have been set for the Trust to achieve by the end of 2016/17. Performance is displayed in the graphs and table on next page.



The 0-10 pain scale was introduced in December 2015, performance increased quickly after that and then remained steady at 89-91% since May 2016.



Performance for this indicator has remained stable (74-76%) this year as the Trust focused on implementing the new pain scale and ensuring pain assessments are routinely carried out.

			2016/17			
	2014/15	2015/16	Target	Q1	Q2	Q3
1. Full set of observations plus pain assessment recorded within 6 hours of admission or transfer to a ward	71%	79%	90%	89%	91%	89%
2. Analgesia administered within 30 minutes of a high pain score	64%	76%	85%	75%	75%	75%

#### Initiatives to be implemented in 2016/17

- To continue to implement the bespoke electronic observation chart for all Critical Care units within PICS.
- Wards performing below target for the two indicators will be reviewed at the Executive Care Omissions Root Cause Analysis (RCA) meetings to identify where improvements can be made. Observation and pain assessment compliance will be monitored as part of the unannounced Board of Directors' Governance Visits to wards which take place each month.

#### How progress will be monitored, measured and reported

- Progress will be monitored at ward, specialty and Trust levels through the Clinical Dashboard and other reporting tools.
- Performance will continue to be measured using PICS data from the electronic observation charts.
- Progress will be reported monthly to the Clinical Quality Monitoring Group and the Board of Directors in the performance report. Performance will continue to be publicly reported through the quarterly Quality Report updates on the Trust's website.

### **Priority 4: Reducing medication errors (missed doses)**

#### Background

Since April 2009, the Trust has focused on reducing the percentage of drug doses prescribed but not recorded as administered (omitted, or missed) to patients on the Prescribing Information and Communication System (PICS).

The most significant improvements occurred when the Trust began reporting missed doses data on the Clinical Dashboard in August 2009 and when the Executive Care Omissions Root Cause Analysis (RCA) meetings started at the end of March 2010.

The Trust has chosen to focus on maintaining performance for missed antibiotics and reducing non-antibiotic missed doses in the absence of a national consensus on what constitutes an expected level of drug omissions.

It is important to remember that some drug doses are appropriately missed due to the patient's condition at the time, and when a patient refuses a drug this is also recorded as a missed dose.

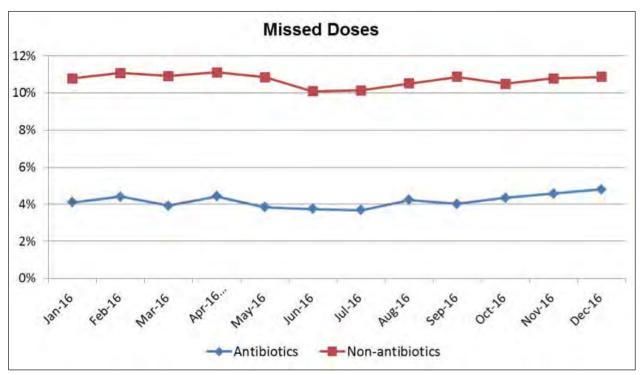
#### Performance

The Trust is aiming to maintain performance for antibiotics and reduce the number of missed nonantibiotics compared to the 2015/16 performance – see table for details:

			2016/17				
	2014/15	2015/16	Target Q1 Q2 Q3				
Antibiotics	4.0%	3.9%	4.0% or below	4.0%	4.0%	4.6%	
Non-antibiotics	10.5%	10.5%	10.0% or below	10.7%	10.5%	10.7%	

Performance for antibiotics (4.0%) met the target for Quarters 1 and 2, but the proportion of missed doses increased during Quarter 3 to 4.6%.

Performance for non-antibiotics has not yet met the target during 2016/17 – after a small improvement in Quarter 2, performance in Quarter 3 returned to 10.7%.



Initiatives to be implemented in 2016/17

- New reports will be developed to identify types and patterns of missed doses across the Trust.
- Individual cases will continue to be selected for further review at the Executive Care Omissions RCA meetings.
- The Corporate Nursing team and Pharmacy are working together to identify where improvement actions should be directed to try to reduce missed non-antibiotics an observational audit has been carried out during Quarter 3, looking at how missed doses and the reasons for them are recorded. The data has been analysed and is due to be reported during Quarter 4.

#### How progress will be monitored, measured and reported

- Progress will continue to be measured at ward, specialty, divisional and Trust levels using information recorded in the Prescribing Information and Communication System (PICS).
- Missed drug doses will continue to be communicated daily to clinical staff via the Clinical Dashboard (which displays real-time quality information at ward-level) and monitored at divisional, specialty and ward levels.
- Performance will continue to be reported to the Chief Executive's Advisory Group, the Chief Operating Officer's Group and the Board of Directors each month to ensure appropriate actions are taken.
- Progress will be publicly reported in the quarterly Quality Report updates published on the Trust's quality web pages. Performance for missed doses by specialty will continue to be provided to patients and the public each month on the mystay@QEHB website.

### **Priority 5: Infection prevention and control**

#### Performance

#### **MRSA Bacteraemia**

The national objective for all Trusts in England in 2016/17 is to have zero avoidable MRSA bacteraemia. During Quarter 3 2016/17, there were no MRSA bacteraemias apportioned to UHB.

All MRSA bacteraemias are subject to a post infection review (PIR) by the Trust in conjunction with the Clinical Commissioning Group. MRSA bacteraemias are then apportioned to UHB, the Clinical Commissioning Group or a third party organisation, based on where the main lapses in care occurred. Trust-apportioned MRSA bacteraemias are also subject to additional review at the Trust's Executive Care Omissions Root Cause Analysis meetings chaired by the Chief Executive.

The table below shows the Trust-apportioned cases reported to Public Health England for the past three financial years:

			2016/17			
Time period	2014/15	2015/16	Q1	Q2	Q3	
Number of cases	6	8	1	2	0	
Agreed trajectory	0	0	0			

There have been three Trust cases year to date (1 in Quarter 1 and 2 in Quarter 2). Whilst this is a better position than last year, learning from the post infection reviews has shown that there were some issues in these cases with Antimicrobial prescribing, MRSA screening and Communication between clinical teams. These actions have been picked up with the teams concerned and via Executive Care Omissions RCA.

#### **Clostridium difficile Infection (CDI)**

The Trust's annual agreed trajectory is a total of 63 cases during 2016/17, although NHS Improvement (NHSI) and the local Clinical Commissioning Group (CCG) measure the Trust against lapses in care. A lapse in care means that correct processes were not fully adhered to, and therefore the Trust had not done everything it could to try to prevent a *C. difficile* infection. Every case is reviewed with the CCG to identify whether any lapses in care occurred.

During Quarter 3 2016/17 UHB reported 24 cases in total, of which 6 had lapses in care. The Trust uses a post infection review (PIR) tool with the local Clinical Commissioning Group to identify whether there were any lapses in care which the Trust can learn from.

The table below shows the total Trust-apportioned cases reported to Public Health England for the past three financial years:

			2016/17		
Time period	2014/15	2015/16	Q1	Q2	Q3
Trust-apportioned cases	66	66	24	23	24
Lapses in care	17	24	13	9	6
Agreed annual trajectory (lapses in care)	67	63		63	

To date in 2016/17 there have been a total of 71 Trust-apportion cases, of which 28 were deemed to have lapses in care, against the trajectory of 63.

There has been an increase in the total Trust-apportioned C. difficile cases and also the number of lapses in care (or avoidable cases) during 2016/17. During Quarter 1 there was a Norovirus outbreak within the Trust and wider community which resulted in an increased number of patients attending hospital with diarrhoea and vomiting, this resulted in increased stool samples being sent which showed increased *C. difficile*.

There is an improvement plan in place which has been agreed with the CCG. The key actions are:

- Ensuring stool samples are sent in a timely manner (this will also ensure that any non-Trust apportioned cases of 0+2 days are identified appropriately).
- Timely isolation of patients with diarrhoea. A 2 hour time frame is being set (best practice example). Failure to achieve this will require a Datix incident form to be submitted to enable better understanding of the issues around isolating patients.
- Completion of Bristol Stool Chart on PICS (this will enable the infection prevention and control team to target support for patients with diarrhoea/loose stool).
- Ensuring correct use of Antimicrobials (antibiotics) this also links with the National CQUIN on Antimicrobial use.

"Typing" has demonstrated that *C. difficile* is not being transmitted between patients in hospital. This helps to show that the Trust's infection prevention and control practices (e.g. hand hygiene) do work.

#### Initiatives to be implemented in 2016/17

A robust action plan has been developed to tackle Trust-apportioned MRSA bacteraemias and Clostridium difficile infections:

• Strict attention to hand hygiene and the use of personal protective equipment (PPE).

- Ensure post infection review (PIR) investigations are completed and lessons learnt are feedback to the wards involved and throughout the Trust. Ensure that all staff groups are involved in the PIR process.
- Ensuring all relevant staff understand and comply with the correct procedure for screening patients for MRSA. This will ensure prompt identification of people who have or are at risk of developing infection so they receive timely and appropriate treatment and management to reduce risk of transmission to other people.
- Assess and improve use of decolonisation therapy, prophylaxis and treatment.
- Ensure appropriate and timely antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events.
- Improve timeliness of isolation of patients with potential *C. difficile*, specimen collection and treatment, and ensure accurate documentation.
- The annual deep cleans of selected wards are currently being undertaken across the Trust, reducing the burden and load of *C. difficile* on wards with high prevalence of *C. difficile*.

#### How progress will be monitored, measured and reported

- The number of cases of MRSA bacteraemia and CDI will be submitted monthly to Public Health England and measured against the 2016/17 trajectories.
- Performance will be monitored via the Clinical Dashboard. Performance data will be discussed monthly at the Board of Directors, Chief Executive's Advisory Group and Infection Prevention and Control Group meetings.
- Any death where an MRSA bacteraemia or CDI is recorded on part one of the death certificate will continue to be reported as serious incidents (SIs) to Birmingham CrossCity Clinical Commissioning Group (CCG).
- Post infection review and root cause analysis will continue to be undertaken for all MRSA bacteraemia and CDI cases.
- Progress against the Trust Infection Prevention and Control delivery plan is monitored by the Infection Prevention and Control Group and reported to the Board of Directors via the Patient Care Quality Reports and the Infection Prevention and Control Annual Report. Progress will also be shared with Commissioners.

# **3. Mortality**

The Trust continues to monitor mortality as close to real-time as possible with senior managers receiving daily emails detailing mortality information and on a longer term comparative basis via the Trust's Clinical Quality Monitoring Group. Any anomalies or unexpected deaths are promptly investigated with thorough clinical engagement.

The Trust has not included comparative information due to concerns about the validity of single measures used to compare trusts.

#### Summary Hospital-level Mortality Indicator (SHMI)

The Health and Social Care Information Centre (HSCIC) first published data for the Summary Hospital-level Mortality Indicator (SHMI) in October 2011. This is the national hospital mortality indicator which replaced previous measures such as the Hospital Standardised Mortality Ratio (HSMR). The SHMI is a ratio of observed deaths in a trust over a period time divided by the expected number based on the characteristics of the patients treated by the trust. A key difference between the SHMI and previous measures is that it includes deaths which occur within 30 days of discharge, including those which occur outside hospital.

The Summary Hospital-level Mortality Indicator should be interpreted with caution as no single measure can be used to identify whether hospitals are providing good or poor quality care . An average hospital will have a SHMI around 100; a SHMI greater than 100 implies more deaths occurred than predicted by the model but may still be within the control limits. A SHMI above the control limits should be used as a trigger for further investigation.

The Trust's latest SHMI is 101 for the period April – September 2016 which is within tolerance. The latest SHMI value for the Trust, which is available on the HSCIC website, is 102 for the period April – June 2016. This is within tolerance.

The Trust has concerns about the validity of the Hospital Standardised Mortality Ratio (HSMR) which was superseded by the SHMI but it is included here for completeness. UHB's HSMR value is 103.19 for the period April – September 2016 as calculated by the Trust's Health Informatics team. The validity and appropriateness of the HSMR methodology used to calculate the expected range has however been the subject of much national debate and is largely discredited<sup>23</sup>. The Trust is continuing to robustly monitor mortality in a variety of ways as detailed above.

<sup>&</sup>lt;sup>1</sup>F Freemantle N, Richardson M, Wood J, Ray D, Khosla S, Sun P, Pagano, D. Can we update the Summary Hospital Mortality Index (SHMI) to make a useful measure of the quality of hospital care? An observational study. BMJ Open. 31 January 2013.

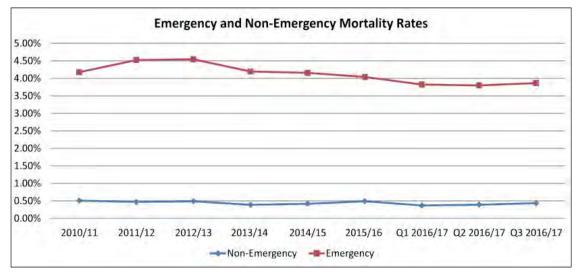
<sup>&</sup>lt;sup>2</sup>Hogan H, Healey F, Neale G, Thomson R, Vincent C, Black, N. Preventable deaths due to problems in care in English acute hospitals: a retrospective case record review. BMJ Quality & Safety. Online First. 7 July 2012.

<sup>&</sup>lt;sup>3</sup>Lilford R, Mohammed M, Spiegelhalter D, Thomson R. Use and misuse of process and outcome data in managing performance of acute and medical care: Avoiding institutional stigma. The Lancet. 3 April 2004.

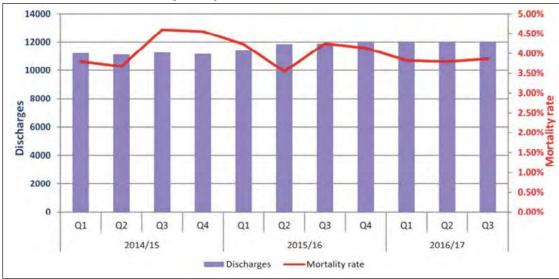
#### **Crude Mortality**

The first graph shows the Trust's crude mortality rates for emergency and non-emergency (planned) patients. The second graph below shows the Trust's overall crude mortality rate against activity (patient discharges) by quarter for the past two calendar years. The crude mortality rate is calculated by dividing the total number of deaths by the total number of patients discharged from hospital in any given time period. The crude mortality rate does not take into account complexity, case mix (types of patients) or seasonal variation.

The Trust's overall crude mortality rate for Quarter 3 2016/17 is 2.95%, this is below 2015/16 (3.04%) and 2014/15 (3.05%).



**Emergency and Non-emergency Mortality Graph** 



#### **Overall Crude Mortality Graph**

# 4. Selected Metrics

#### **Selected Metrics - Patient safety indicators**

Indicator	2014/15	2015/16	2016/17	Peer Group Average (where available)
1(a). Patients with MRSA infection/ 100,000 bed days (includes all bed days from all specialties) Lower rate indicates better performance	1.52	2.06	1.50	0.50
Time period	2014/15	2015/16	April – September 2016	April – September 2016
Data source(s)	Trust MRSA data reported to PHE, HES data (bed days)	Trust MRSA data reported to PHE, HES data (bed days)	Trust MRSA data reported to PHE, HES data (bed days)	Trust MRSA data reported to PHE, HES data (bed days)
Peer group				Acute trusts in West Midlands
1(b). Patients with MRSA infection/ 100,000 bed days (aged >15, excluding Obstetrics, Gynaecology and elective Orthopaedics) <i>Lower rate indicates better</i> <i>performance</i>	1.52	2.07	1.51	0.55
Time period	2014/15	2015/16	April – September 2016	April – September 2016
Data source(s)	Trust MRSA data reported to PHE, HES data (bed days)	Trust MRSA data reported to PHE, HES data (bed days)	Trust MRSA data reported to PHE, HES data (bed days)	Trust MRSA data reported to PHE, HES data (bed days)
Peer group				Acute trusts in West Midlands

Indicator	2014/15	2015/16	2016/17	Peer Group Average (where available)
2(a). Patients with <i>C. difficile</i> infection /100,000 bed days (includes all bed days from all specialties) <i>Lower rate indicates</i> <i>better performance</i>	16.73	16.76	23.58	16.35
Time period	2014/15	2015/16	April – September 2016	April – September 2016
Data source(s)	Trust CDI data reported to PHE, HES data (bed days)	Trust CDI data reported to PHE, HES data (bed days)	Trust CDI data reported to PHE, HES data (bed days)	Trust CDI data reported to PHE, HES data (bed days)
Peer group				Acute trusts in West Midlands
2(b). Patients with <i>C. difficile</i> infection /100,000 bed days (aged >15, excluding Obstetrics, Gynaecology and elective Orthopaedics) <i>Lower rate indicates better</i> <i>performance</i>	16.82	16.83	23.71	18.12
Time period	2014/15	2015/16	April – September 2016	April – September 2016
Data source(s)	Trust CDI data reported to PHE, HES data (bed days)	Trust CDI data reported to PHE, HES data (bed days)	Trust CDI data reported to PHE, HES data (bed days)	Trust CDI data reported to PHE, HES data (bed days)
Peer group				Acute trusts in West Midlands

Indicator	2014/15	2015/16	2016/17	Peer Group Average (where available)
3(a) Patient safety incidents (reporting rate per 1000 bed days) Higher rate indicates better reporting	47.2	63.3	60.8	60.7
Time period	2014/15	2015/16	April – December 2016	October 2015 – March 2016
Data source(s)	Datix (incident data), Trust admissions data	Datix (incident data), Trust admissions data	Datix (incident data), Trust admissions data	Calculated from data on NRLS website (Organisational Patient Safety Incidents Workbook)
Peer group				Acute (non specialist) hospitals
<b>3(b) Never Events</b> Lower number indicates better performance	3	5	0	Not available
Time period	2014/15	2015/16	April – December 2016'	
Data source(s)	Datix (incident data)	Datix (incident data)	Datix (incident data)	
Peer group				
4(a) Percentage of patient safety incidents which are no harm incidents Higher % indicates better performance	81.0%	82.0%	82.2%	75.5%
Time period	2014/15	2015/16	April – December 2016	October 2015 – March 2016
Data source(s)	Datix (incident data)	Datix (incident data)	Datix (incident data)	NRLS website (Organisational Patient Safety Incidents Workbook
Peer group				Acute (non specialist) hospitals

27 University Hospitals Birmingham NHS Foundation Trust | Quality Account Update for Quarter 3 2016/17 (October - December)

Indicator	2014/15	2015/16	2016/17	Peer Group Average (where available)
4(b) Percentage of patient safety incidents reported to the National Reporting and Learning System (NRLS) resulting in severe harm or death	0.12%	0.14%	0.14%	0.1%
Lower % indicates better performance				
Time period	2014/15	2015/16	April – December 2016	October 2015 – March 2016
Data source(s)	Datix (patient safety incidents reported to the NRLS)	Datix (patient safety incidents reported to the NRLS)	Datix (patient safety incidents reported to the NRLS)	Calculated from data on NRLS website (Organisational Patient Safety Incidents Workbook)
Peer group				Acute (non specialist) hospitals
4(c) Number of patient safety incidents reported to the National Reporting and Learning System (NRLS)	16,222	20,516	<b>16,046</b> (9 months)	<b>11,402</b> (6 months)
Time period	2014/15	2015/16	April – December 2016	October 2015 – March 2016
Data source(s)	Datix (patient safety incidents reported to the NRLS)	Datix (patient safety incidents reported to the NRLS)	Datix (patient safety incidents reported to the NRLS)	Calculated from data on NRLS website (Organisational Patient Safety Incidents Workbook)
Peer group				Acute (non specialist) hospitals

#### **Selected Metrics - Clinical effectiveness indicators**

Indicator	2014/15	2015/16	2016/17	Peer Group Average (where available)
5(a) Emergency readmissions within 28	13.51%	13.48%	13.36%	13.04%
<b>days (%)</b> (Medical and surgical specialties - elective and emergency admissions aged >15) % <i>Lower % indicates better</i> <i>performance</i>	England: 13.88%	England: 14.14%		England: 13.99%
Time period	2014/15	2015/16	April – June 2016	April – June 2016
Data source(s)	HES data	HES data		HES data
Peer group				University hospitals
5(b). Emergency readmissions within 28 days (%) (all specialties) Lower % indicates better performance	13.48% England: 13.25%	13.39% England: 13.50%	13.34%	13.24% England: 13.37%
Time period	2014/15	2015/16	April – June 2016	April – June 2016
Data source(s)	HES data	HES data	HES data	HES data
Peer group				University hospitals
5(c). Emergency readmissions within 28 days of discharge (%) Lower % indicates better performance	10.75%	10.67%	10.63%	Not available
Time period	2014/15	2015/16	April –November 2016	
Data source(s)	Lorenzo	Lorenzo	Lorenzo	
Peer group				

29 University Hospitals Birmingham NHS Foundation Trust | Quality Account Update for Quarter 3 2016/17 (October - December)

Indicator	2014/15	2015/16	2016/17	Peer Group Average (where available)
6. Falls (incidents reported as % of patient episodes) Lower % indicates better performance	2.2%	2.1%	2.2%	Not available
Time period	2014/15	2015/16	April – November 2016	
Data source(s)	Datix (incident data), Trust admissions data	Datix (incident data), Trust admissions data	Datix (incident data), Trust admissions data	
Peer group				
7. Stroke in-hospital mortality Lower % indicates better performance	9.5%	5.0%	2.7%	Not available
Time period	2014/15	2015/16	April – November 2016	
Data source(s)	SSNAP data	SSNAP data	SSNAP data	
Peer group				
8. Percentage of beta blockers given on the morning of the procedure for patients undergoing first time coronary artery bypass graft (CABG)	94.7%	97.5%	96.5%	Not available
Higher % indicates better performance				
Time period	2014/15	2015/16	April – November 2016	
Data source(s)	Trust PICS data	Trust PICS data	Trust PICS data	
Peer group				

#### Notes on patient safety indicators

The data shown is subject to standard national definitions where appropriate. The Trust has also chosen to include infection and readmissions data which has been corrected to reflect speciality activity, taking into account that the Trust does not undertake paediatric, obstetric, gynaecology or elective orthopaedic activity. These specialties are known to be very low risk in terms of hospital acquired infection, for example, and therefore excluding them from the denominator (bed day) data enables a more accurate comparison to be made with peers.

1a, 1b, 2a, 2b, 5a, 5b: Receipt of HES data from the national team always happens two to three months later, these indicators will be updated in the next quarterly report.

**3a:** The NHS England definition of a bed day ("KH03") differs from UHB's usual definition. For further information, please see this link: http://www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and-occupancy/

NHS England have also reduced the number of peer group clusters (trust classifications), meaning UHB is now classed as an 'acute (non specialist)' trust and is in a larger group. Prior to this, UHB was classed as an 'acute teaching' trust which was a smaller group.

There has been a delay in receiving the HES bed day data; this will be updated before publication if it becomes available.

**4c:** The number of incidents shown only includes those classed as patient safety incidents and reported to the National Reporting and Learning System. This number may change slightly as some of the data for December is yet to be validated.

5a, 5b: The methodology has been updated to reflect the latest guidance from the Health and Social Care Information Centre. The key change is that day cases and regular day case patients, all cancer patients or patients coded with cancer in the previous 365 days are now excluded from the denominator. This indicator includes patients readmitted as emergencies to the Trust or any other provider within 28 days of discharge. Further details can be found on the Health and Social Care Information Centre website. Any changes in data since the previous Quality Report and due to updates made to the national HES data.

**5c:** This indicator only includes patients readmitted as emergencies to the Trust within 28 days of discharge and excludes UHB cancer patients. The data source is the Trust's patient administration system (Lorenzo). The data for previous years has been updated to include readmissions from 0 to 27 days and exclude readmissions on day 28 in line with the national methodology. Any changes in previously reported data are due to long-stay patients being discharged after the previous years' data was analysed.

8: Beta blockers are given to reduce the likelihood of peri-operative myocardial infarction and early mortality. This indicator relates to patients already on beta blockers and whether they are given beta blockers on the day of their operation. All incidences of beta blockers not being given on the day of operation are investigated to understand the reasons why and to reduce the likelihood of future omissions. During 2014/15 there was a small adjustment to the methodology of this indicator, resulting in a very small change to the indicator results for that year.