AGENDA ITEM NO:

UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST
BOARD OF DIRECTORS
THURSDAY 22 SEPTEMBER 2011

Title:	**PERFORMANCE INDICATORS REPORT**
Responsible Director:	Executive Director of Delivery
Contact:	Andy Walker, Divisional Planning Manager Daniel Ray, Director of Informatics & Patient Administration

Purpose:	To update the Board of Directors on the Trust's performance against national indicators and performance against internal targets.
Confidentiality Level & Reason:	N/A
Annual Plan Ref:	Affects all strategic aims.
Key Issues Summary:	The following indicators are currently not in line with targets and therefore exception reports have been provided: • MRSA – UHB Attributable Cases • Cancer – 62 day GP referrals • Cancer – 62 day referrals from screening • Cancer – 62 day consultant upgrades • Quality of Stroke Care • Delayed Transfers of Care • A&E Clinical Quality Indicators • PICS red lines • Non-Emergency Mortality Audit Responses • Repeat Follow-up Outpatient Cancellations • Slot Unavailability • Mandatory Training • External Agency & Bank Spend • Omitted Drugs Further details and action taken are included in the report and Appendix B. Exception reports for external indicators now contain an assessment of the nature of the risk associated with non-achievement.
Recommendations:	The Board of Directors is requested to: **Accept** the report on progress made towards achieving performance targets and associated actions.

Signed:	**Date:** 9 September 2011

UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST

BOARD OF DIRECTORS

THURSDAY 22 SEPTEMBER 2011

PERFORMANCE INDICATORS REPORT

PRESENTED BY THE EXECUTIVE DIRECTOR OF DELIVERY

1. **Purpose**

This paper provides an update to the Board of Directors on the Trust's performance against national indicators, including those incorporated in Monitor's Compliance Framework and performance against internal targets. Performance against these indicators is shown in Appendix A.

2. **Exception reports**

For targets included in the Monitor Compliance Framework and the NHS Operating Framework, exception reports are contained below. The Trust remains above internal trajectory for MRSA but is now back below trajectory for *Clostridium difficile*. In the case of MRSA one case from April has now been removed from the Trust's trajectory following an appeal to the Birmingham & Solihull Cluster. The Trust was back above target for 31 day first treatments in June and July but was below target for 62 day GP referrals in both months. The Trust was also below target for the other two 62 day indicators in June. In July and August the Trust continued to underachieve the same three A&E Clinical Quality Indicators as in previous months. Performance for the length of stay element of the Quality of Stroke Care indicator was below target in July however TIA performance was back above target. Delayed transfers of care continued to be above the threshold.

Exception reports and monthly data for these indicators as well as internal indicators that are currently red are contained in Appendix B. Following further improvement in data quality and performance for both appraisal and local induction both these indicators are now amber with performance for July of 77.7% and 91.0% respectively and, provided similar performance is maintained, will next be reported in November 2011.

The following internal targets are currently considered exceptions:

a) PICS red lines
b) Non-Emergency Mortality Audit Response Rates
c) Repeat Follow-up Outpatient Cancellations
d) Slot Unavailability
e) Mandatory Training
f) External Agency & Bank Spend
g) Omitted Drugs

Exception reports for external indicators will now routinely contain an assessment of the nature of the risk associated with non-achievement. For example where there is a contractual financial penalty associated with a particular indicator it will detail the likely cost to the Trust. Risks this month have been categorised as regulatory, contractual and/or reputational. Other categories that may be applied in future include strategic and financial and further categories will be included, if required.

Details of national indicators currently considered exceptions are contained below:

2.1 MRSA – UHB Attributable Cases – Regulatory, Contractual & Reputational Risk

The Trust performance for MRSA bacteraemia to date is now three cases. The Trust's full year trajectory for 2011/12 is seven cases. Following an appeal to the Trust's commissioners to remove one case that occurred in April from trajectory, a case review meeting was held with the Birmingham and Solihull Cluster and Health Protection Agency (HPA) which agreed that this case will no longer be attributed to the Trust. Subsequently there was another MRSA bacteraemia in August bringing the total back to three cases. The Trust is therefore now 0.5 cases over the internal year to date trajectory.

Performance is within the Trust's external trajectory reported to the Department of Health and used by Monitor for the Compliance Framework and the Trust's commissioners for contract management; however it remains a regulatory risk. MRSA cases are published by the HPA on a weekly basis therefore this also constitutes a reputational risk particularly as the HPA is retaining the case that has been removed from trajectory in its database and reports.

Please refer to the Chief Nurse's Infection Control Report for further details and action taken.

2.2 Cancer Targets – Regulatory, Contractual & Reputational Risk

In June the Trust did not achieve all three 62 day cancer targets. Performance for referrals from GPs was 78.0% against the 85% target. 86.7% of referrals from screening and 88.7% of consultant upgrades were treated within 62 days against the 90% targets. For GP referrals there 12.0 accountable breaches affecting 17 patients. For consultant upgrades there were 3.5 accountable breaches (5 patients) out of 31.0 and for referrals from screening there were 2 breaches out of 15. The Trust was however above the threshold for all the cancer targets for Quarter 1 as a whole. In July the Trust again did not achieve the 62 day GP referral target with performance of 82.6%. Activity was significantly lower in July so there were 7.5 breaches affecting 11 patients.

The Trust has continued to see significant problems with late referrals with 13 received in June. Of these 9 breached the 62 day target. Of the late referrals 4 were from Heart of England NHS Foundation Trust, 2 from Sandwell and West Birmingham Hospitals NHS Trust and 2 from Walsall Healthcare NHS Trust. The other main reasons for breaches were patient choice, DNAs and clinically complex cases. Root cause analysis continues on all breaches to see whether there are any lessons that can be learned to improve our internal processes to ensure that patients are treated in a timely manner.

The cancer targets are used by Monitor in the Trust's governance rating although this will be unaffected as the Trust met all the targets over the Quarter. They are also monitored by the CQC as part of its Quality and Risk Profile for the Trust.

The targets are included in contract monitoring by both NHS South Birmingham and the West Midlands Specialised Commissioning Team. The contract states that there can be a 2% penalty of service line income for failing to achieve each target. On a monthly basis, if the penalty was imposed based on monthly performance, the Trust could be penalised around £45k for each cancer target it did not achieve on a monthly basis. NHS South Birmingham has however never invoked this clause in the contract following previous months when cancer targets were not achieved or suggested that doing so was even a possibility. The financial risk associated with this failure is therefore relatively low however continued failure will be escalated as part of the normal contractual performance management process.

Performance against the indicators is also published by the Department of Health on a monthly basis and is included in the Trust's Quality Account so failure to achieve these targets may impact on the Trust's reputation.

2.3 <u>Quality of Stroke Care – Length of Stay & TIA – Regulatory & Contractual Risk</u>

July performance for the stroke length of stay (LOS) target currently stands at 79.1% however this is based on assumed length of stay for patients who have been transferred to Moseley Hall Hospital (MHH). Reported performance for June has fallen to 75.7% following the receipt of Quarter 1 length of stay data from Birmingham Community Healthcare NHS Trust. Work is underway to ensure the more robust and timely receipt of LOS data from MHH to allow more accurate reporting.

Activity was significantly higher in July and August with 41 and 43 stroke patients discharged respectively compared to the monthly average of 36 seen in 2010/11. The number of beds on Ward 411 that were allocated to Stroke rather than Neurology was increased to make certain that sufficient capacity was available to ensure that patients

received appropriate care. Work continues to ensure that there will be sufficient capacity to treat the increased number of stroke cases seen over the summer months.

Following the change to the definition of the TIA target last month by the Department of Health, processes have been changed to ensure that high-risk TIA patients are seen within 24 hours rather than the next day. Consequently 80% of patients were treated within 24 hours in July against the target of 60%.

The stroke and TIA targets are included in the acute contract with NHS South Birmingham and are subject to the usual contractual escalation processes but no financial penalty. Stroke performance is not routinely available in the public domain other than as part of the biennial Sentinel Audit of Stroke so the risk is likely to be contractual rather than reputational. The targets are likely to be included in Monitor's Compliance Framework from Quarter 3 so if performance is not sustained the regulatory risk will increase.

2.4 Delayed Transfers of Care – Contractual & Repuational Risk

At the end of July there were 65 patients whose discharge was delayed, an increase from 57 at the end of June. Performance for the national indicator therefore increased to 6.63% from 5.63% against the target of 3.50%. By the end of August the number of delayed patients had fallen to 46 which resulted in the national indicator falling to 4.75%.

Following significant pressure applied by the Trust to Birmingham City Council (BCC) the number of Birmingham patients delayed, particularly for assessments has fallen. BCC have now authorised agency workers to reduce assessment delays. The Trust has also worked with the commissioners around the equipment service and there are now no delays for equipment. There are some delays waiting for domiciliary care and the Director of Partnerships is working with that team to ensure these are resolved. A pilot is also being explored whereby assessments would be carried out by UHB rather than local authority staff. The focus now needs to shift to ensuring that NHS delayed discharges are minimised as well as ensuring that the improved performance by the City Council is maintained.

Delayed transfers of care is a contractual target with NHS South Birmingham and following 3 months of above threshold performance a tri-partite meeting between UHB, NHS South Birmingham and Birmingham City Council must be arranged. The number of patients delayed is published on a monthly basis by the Department of Health and is frequently included in local press reports however the reputational risk associated with this target is primarily focussed on Birmingham City Council rather than the Trust.

2.5 A&E Clinical Quality Indicators – Reputational Risk

In July and August the Trust did not meet three of the five new indicators. Monitor has indicated that from Quarter 2 it will only be monitoring the Trust against the Total Time in A&E indicator. This will be measured using the percentage of patients with a total time of less than four hours rather than the 95th percentile time. This is therefore a return to the old four hour target but with a 95% rather than 98% threshold. The indicators in Appendix A have therefore been rearranged to reflect the new regime with Total Time in the Monitor chart and the remaining indicators in the Operating Framework chart.

2.5.1 Time to Assessment

In July the 95th percentile time to assessment rose to 30 minutes from 29 minutes in June. It then remained static at 30 minutes in August. Data quality is still thought to be a significant contributing factor to the poor reported performance. The current Emergency Department record card does not have a specific location to record the assessment time. A new card is therefore being introduced from mid-September with a box for the assessment time which should lead to improved data collection for this measure and consequently reported performance. The ED Co-ordinators have also been given additional training around this indicator and the associated problems of data quality. It is also proposed that the ED should be an early implementer of electronic observations which would automate data collection for this indicator.

2.5.2 Time to Treatment

In July the median time to treatment remained static at 72 minutes against the target of 60 minutes. In August the time fell to 63 minutes which is only just outside the target of 60 minutes. It has been identified that times tend to be longer in the evening and night than during the day and the possibility of rearranging rotas to give more support at these times is being explored. In addition the workflow in the department has been changed so that when additional senior cover is available in the department some patients are seen by a clinician straight away bypassing some of the delays in the standard flow. From September when an additional consultant will join the department additional senior resource will be placed in the Ambulatory Care stream to ensure that this cohort of patients is treated more promptly.

The new junior doctors who joined the department in August have been made aware of the new indicators and the importance of accurate data capture. Individuals whose data quality is poor have been identified and the importance of this reinforced to them.

2.5.3 Unplanned Re-attenders

The percentage of patients who reattended the ED within 7 days of their original attendance fell to 6.40% in July and subsequently rose again to 7.02% in August against the target of 5%. Work to develop individual care pathways for the top 20 frequent attenders to the ED continues.

The treatment of every patient who re-attends more than once within a month is now being reviewed by an ED consultant to identify whether there were any improvements that could have been made to their care.

A national contract variation has been issued to reflect the change in performance management in relation to this target by the Department of Health which will be included in the contract with the Trust's commissioners. As the Trust is meeting one indicator in both the timeliness and patient impact groups it will not be subject to escalation under this provision so the contractual risk associated with these indicators is currently low.

Performance against the new indicators in July was published on the Trust's website in August, as required by the Department of Health. National performance indicates that a significant number of trust are struggling to meet these requirements with, for example, 86.5% of trusts having a reattendance rate of above 5% in April 2011, 70.2% having a 95th percentile assessment time of greater than 15 minutes and 45.5% of patients having a median treatment time of greater than 60 minutes.

3. Recommendations

The Board of Directors is requested to:

Accept the report on progress made towards achieving performance targets and associated actions.

Tim Jones
Executive Director of Delivery

APPENDIX A

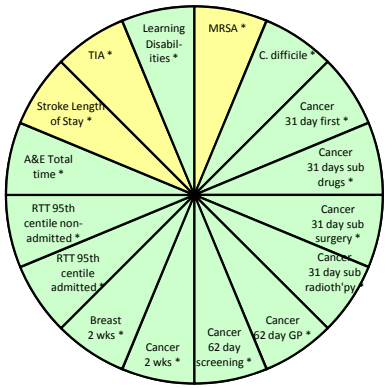
University Hospitals Birmingham NHS
NHS Foundation Trust

2011/12 Key Performance Indicator Report

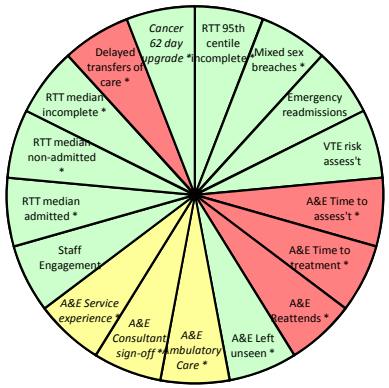
Where data is not currently available or performance is being benchmarked indicator names are in italics. These have been assigned 'amber' unless considered high risk where they have been assigned 'red'.
* Indicators included in the acute contract.

National Performance

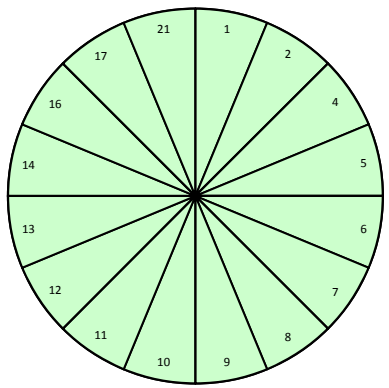
Monitor Governance Rating



Operating Framework Indicators not Used by Monitor

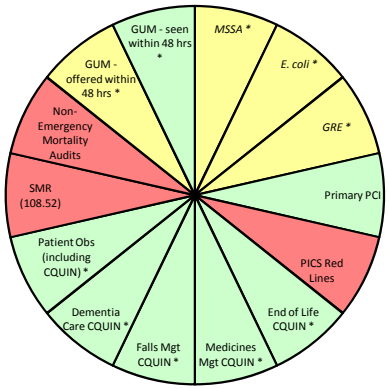


CQC Registration Outcomes

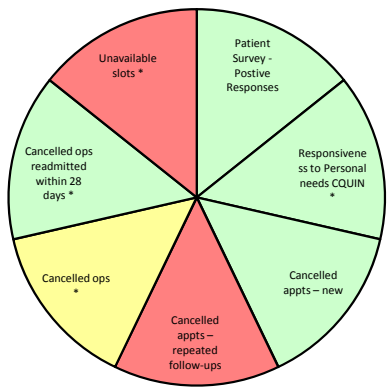


Trust Priorities

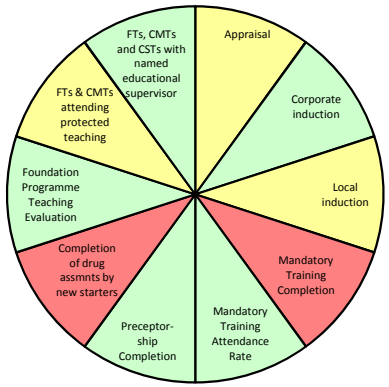
Clinical Quality & Outcomes



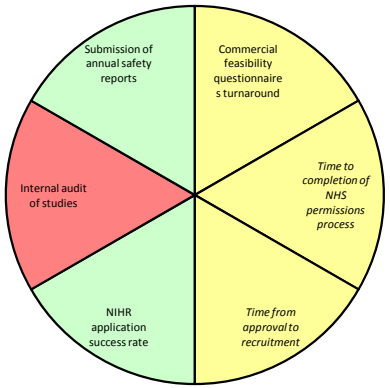
Patient Experience



Education & Training

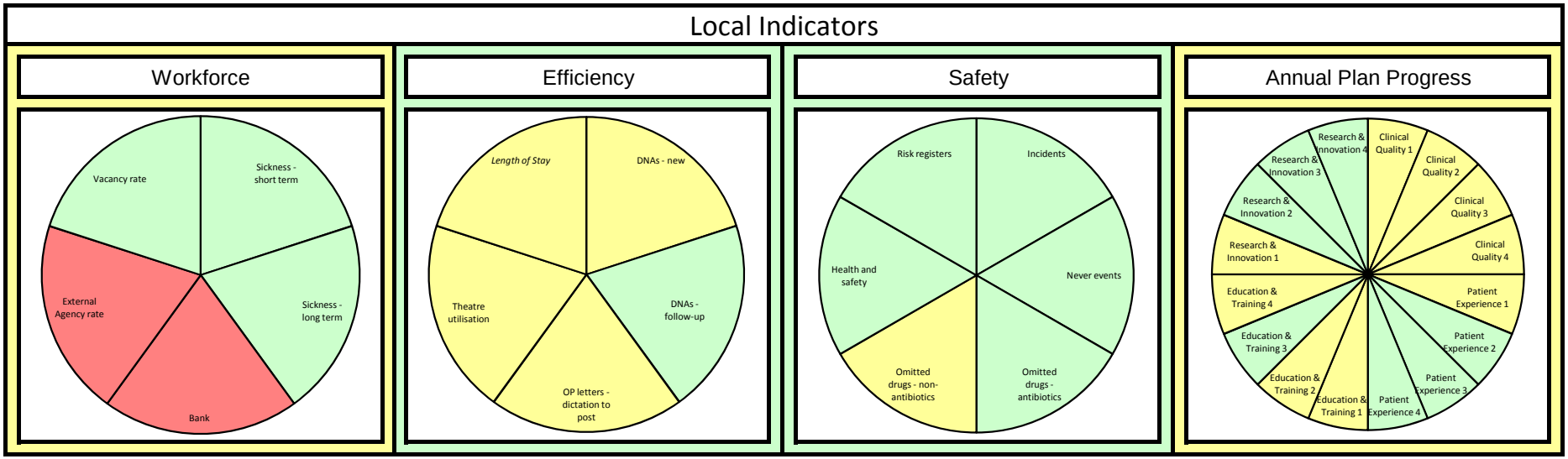


Research & Innovation



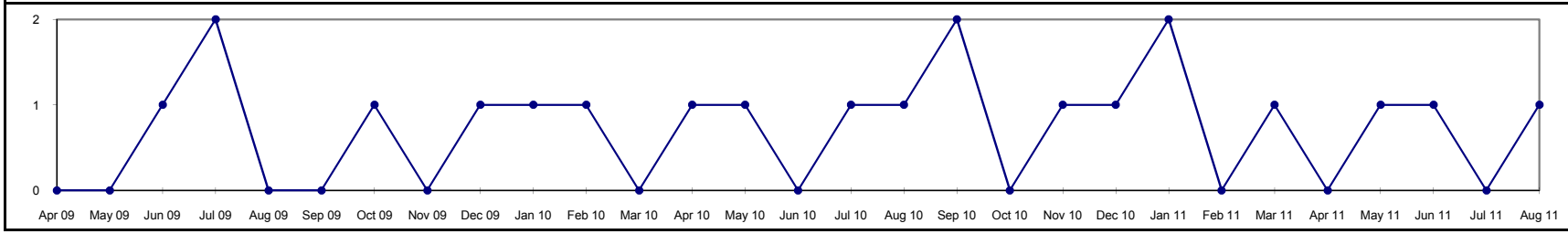
APPENDIX A

University Hospitals Birmingham NHS
NHS Foundation Trust

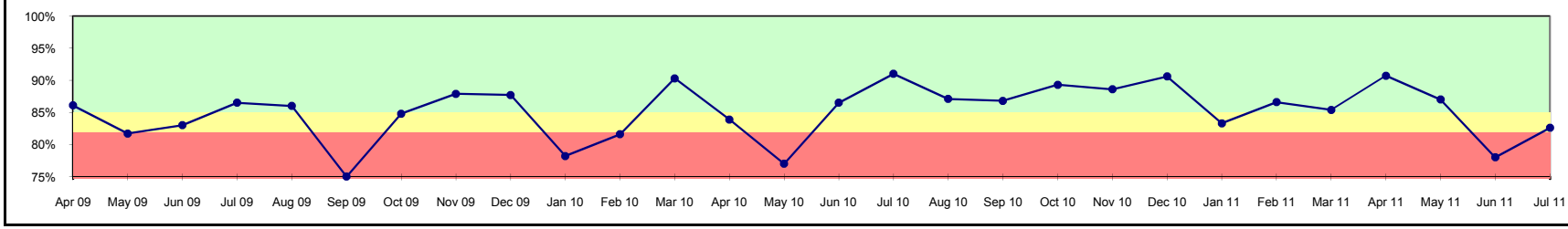


APPENDIX B

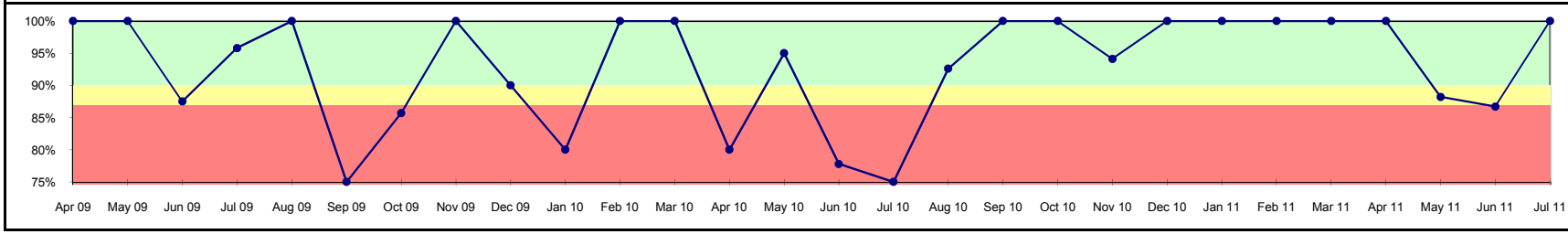
MRSA - UHB Attributable Cases								Monitor Governance			> 8	8	≤ 7
	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	YTD
MRSA	0	1	1	0	1								**3**



Cancer - 62 Day GP Referrals								Monitor Governance			< 82%	82-85%	≥ 85%
	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	YTD
62 Day GP	90.7%	87.0%	78.0%	82.6%									**85.1%**

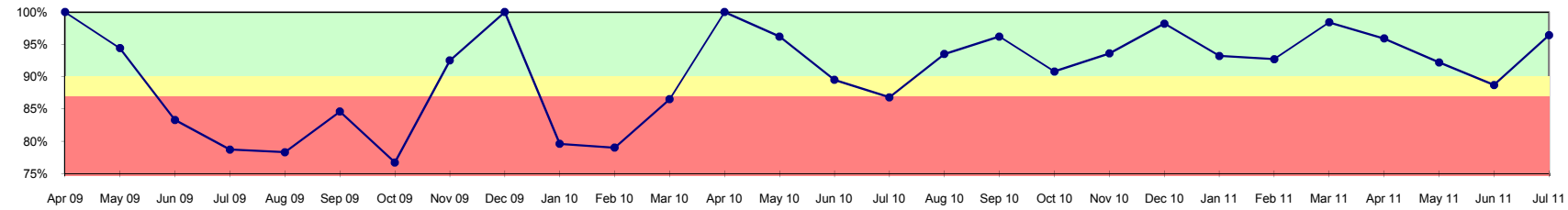


Cancer - 62 Day Screening								Monitor Governance			< 87%	87-90%	≥ 90%
	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	YTD
62 Day Scrn	100.0%	88.2%	86.7%	100.0%									**94.3%**



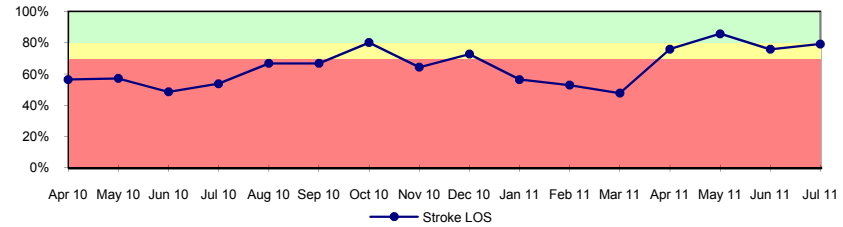
APPENDIX B

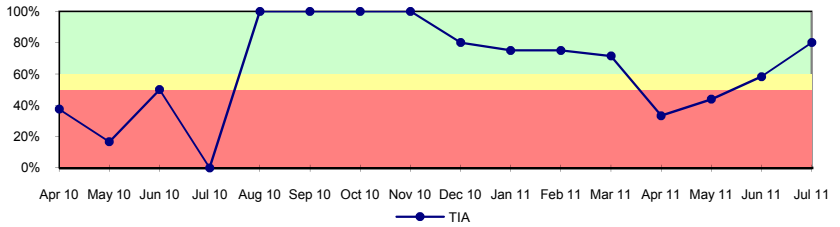
Cancer - 62 Day Consultant Upgrade								Monitor Governance			< 87%	87-90%	≥ 90%
	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	YTD
62 Day Upgrad	95.9%	92.2%	88.7%	96.4%									**93.1%**



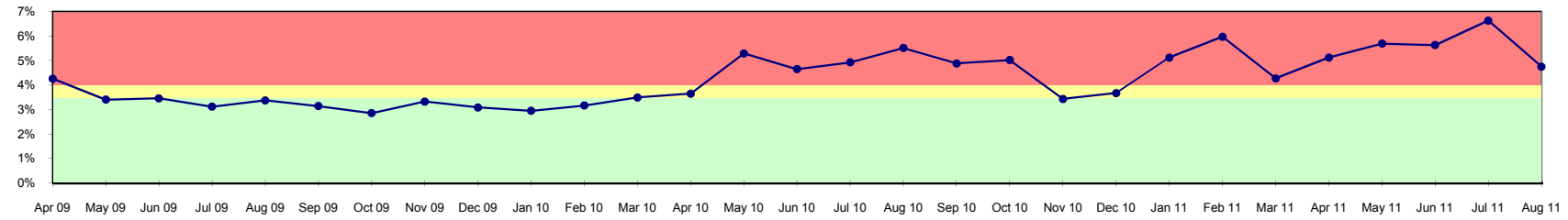
Quality of Stroke Care - 90% LOS on Stroke Unit Quality of Stroke Care - TIAs Treated within 24 hours								Monitor Governance			< 70% < 50%	70-80% 50-60%	≥ 80% ≥ 60%
	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	YTD
Stroke LOS	75.8%	85.7%	75.7%	79.1%									**78.4%**
TIA	33.3%	43.8%	58.3%	80.0%									**52.0%**

Stroke LOS performance includes expected LOS at Moseley Hall Hospital.





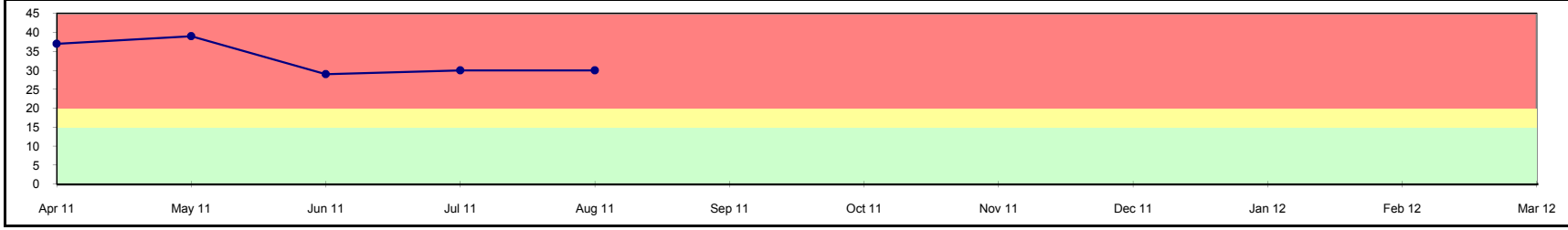
Delayed Transfers of Care								Operating Framework			> 4.0%	≤ 4.0%	≤ 3.5%
	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	YTD
DToC	5.08%	5.69%	5.63%	6.63%	4.75%								**5.56%**



APPENDIX B

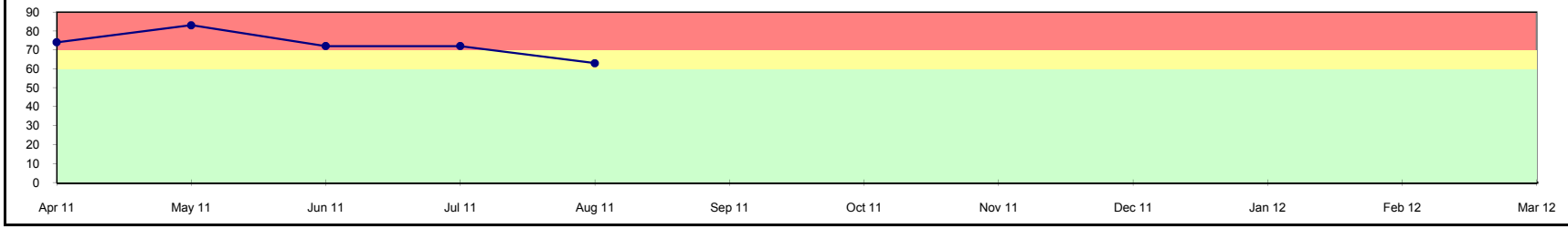
A&E Clinical Quality - Time to Assessment (95th percentile)	Monitor Governance	> 20 mins	15-20 mins	≤ 15 mins

	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	Latest
Assessment	37	39	29	30	30								**30**



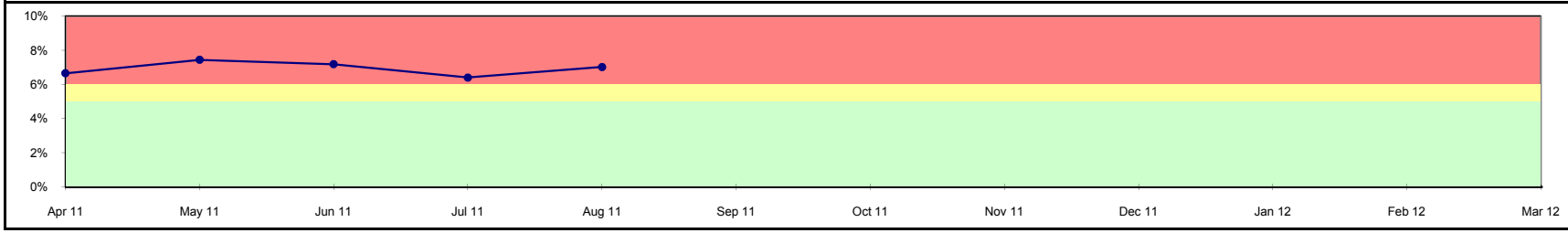
A&E Clinical Quality - Time to Treatment (Median)	Monitor Governance	> 70 mins	60-70 mins	≤ 60 mins

	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	Latest
Treatment	74	83	72	72	63								**63**



A&E Clinical Quality - Reattendance Rate Within 7 Days	Monitor Governance	> 6.0%	5.0-6.0%	≤ 5.0%

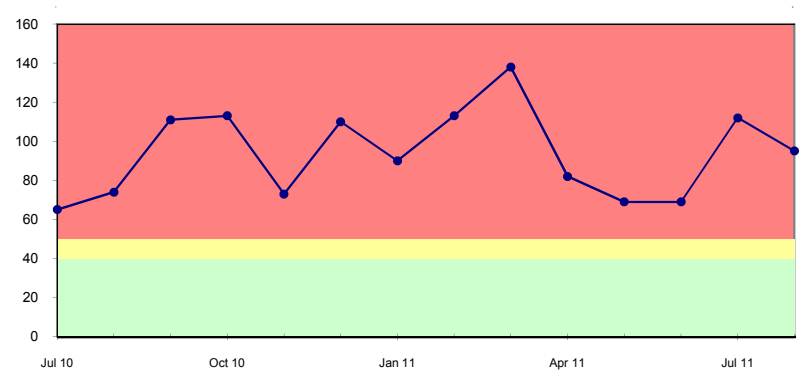
	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	Latest
Reattenders	6.65%	7.44%	7.18%	6.40%	7.02%								**7.02%**



APPENDIX B

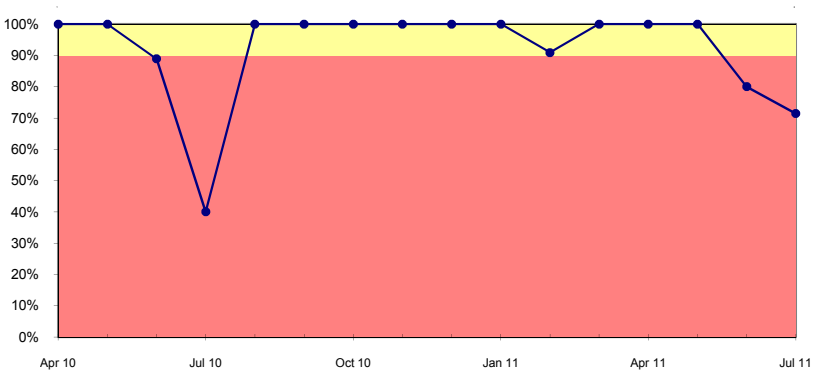
PICS Red Lines													Clinical Quality & Outcomes	> 50	40-50	≤ 40
	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	Latest			
Red Lines	82	69	69	112	95								95			

The number of 'red lines' on PICS increased to 112 as of 31 July and subsequently fell to 95 as of 31 August.
The largest increase was seen in General Medicine where a particular operational problem has been identified and is being addressed. Patients who are being discharged from the Clinical Decision Unit (CDU) and brought back to the 'hot' clinics are not being discharged from PICS between leaving CDU and returning to clinic. These clinics are now being set up in outpatient PICS so that patients can be discharged from the system between visits.



Non-emergency mortality audit response rate													Clinical Quality & Outcomes	< 90%	90-100%	100%
	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	YTD			
Non-Em Mortality	100.0%	100.0%	80.0%	71.4%									85.2%			
Forms sent out	5	5	10	7									27			
Forms completed	5	5	8	5									23			

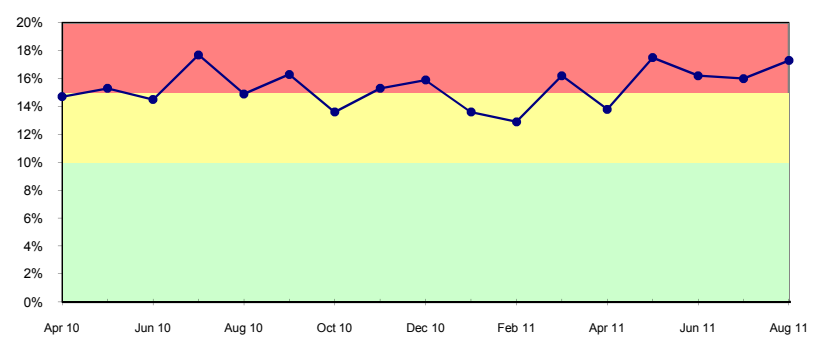
Non-emergency mortality audits now appear to be being completed in a more timely manner with 100% completion for April and May and two audits outstanding from both June and July 2011. Year to date performance has therefore increased to 85.2% from 66.7% reported in the last paper.
The consultants with uncompleted surveys have been reminded of the need to complete them as soon as possible.



APPENDIX B

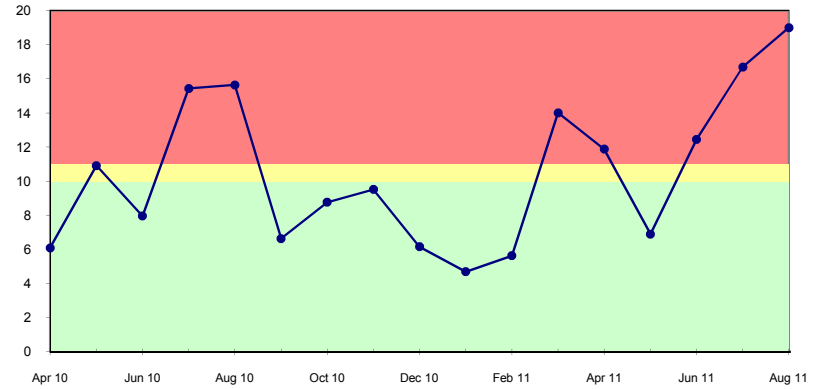
Repeat Follow-up Outpatient Cancellations								Patient Experience			> 15%	10 - 15%	≤ 10%
	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	Latest
OP Canx	13.8%	17.5%	16.2%	16.0%	17.3%								**17.3%**

The percentage of patients who had a follow-up outpatient appointment rearranged who had it changed on more than one occasion fell to 16.0% in July from 16.2% in June but increased to 17.3% in August. Performance therefore continues to be above the target of 10%.
Divisional staff have been reminded of the importance of considering whether a patient has already had an appointment rearranged when considering which patients should have their appointment changed.
A follow-up deep-dive will be going to the Chief Operating Officer's Group in September to identify whether there has been any change in areas with poor performance on this indicator as the number of repeat cancellations has remained static overall.



Slot Unavailability								Patient Experience			> 11	10-11	≤ 10
	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	Latest
Slots	11.88	6.89	12.45	16.69	19.00								**19.00**

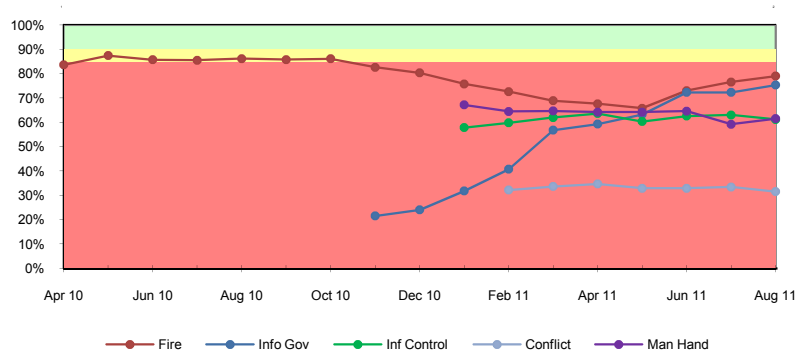
Slot unavailability increased in July and August to 16.69 and 19.00 unavailable slots per 100 successful bookings respectively. This reflects the pattern seen in previous years whereby the highest unavailability is seen in July and August due to reduced capacity over the summer months.
The largest number of unavailable slots continue to be for ENT and Cardiology and the actions outlined in last month's report continue to be implemented. Additional slots have now been published for Cardiology on Choose and Book and an additional locum consultant is also being recruited, all of whose slots will be published. The booking window for ENT has been extended to 8 weeks as a short-term measure whilst the actions to increase capacity are being implemented. A medium and long-term plan for ENT Medical Staffing is also being developed to redraw the overall strategic staffing plans for the department going forward and ensure there is sufficient capacity. These actions have led to a significant drop in the number of unavailable slots in early September.



APPENDIX B

Mandatory Training								Education & Training					< 85%	85-90%	≥ 90%
	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	Latest		
Fire	67.6%	65.8%	73.0%	76.6%	79.0%								79.0%		
Info Gov	59.3%	63.2%	72.3%	72.3%	75.3%								75.3%		
Inf Control	63.6%	60.3%	62.6%	63.0%	61.2%								61.2%		
Conflict	34.7%	32.9%	32.9%	33.4%	31.5%								31.5%		
Man Hand	64.2%	64.2%	64.6%	59.2%	61.5%								61.5%		

A number of issues have been identified with respect to the accuracy and validity of the mandatory training data above. These issues can broadly be categorised as related to data entry and the database structure which drives the report. The following actions are currently being taken to address these issues. The processes associated with data entry have now been process mapped and a number of potential error points have been identified and are being addressed. Performance evidence indicators to measure data quality are being put in place and reports against three of these indicators have been introduced since the beginning of September. The reports available to date indicate that all data received each day by the L&D team for entry into ESR are being entered within 48 hours. This process of monitoring will continue. A whole system review of the databases which hold staff training information is being undertaken to allow the development of a master staff index which will be piloted in the Delivery portfolio.

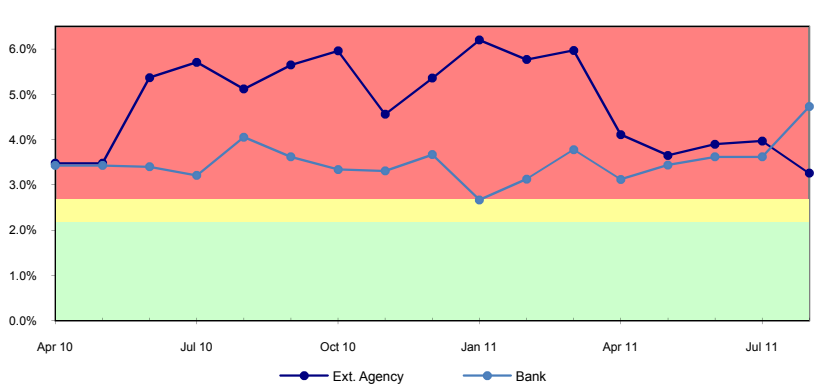


Percentage of total staff costs spent on agency & bank staffing								Workforce					> 2.7%	2.2 - 2.7%	≤ 2.2%
	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	YTD		
Ext. Agency	4.11%	3.65%	3.90%	3.97%	3.26%								3.77%		
Bank	3.12%	3.44%	3.62%	3.62%	4.73%								3.71%		

August spend on external agency staff was 836k (3.26%) down from £1,006k (3.97%) in July. Bank spend increased to £1,213 (4.73%) from £917k (3.62%) in July.

The work undertaken to ensure that junior doctor rotas are filled from August has been largely successful with fewer gaps on rotas from August than in previous months resulting in a significant fall in agency spend. Concerted work to ensure that bank staff are used before external agency has led to an increase in bank spend which is usually seen over the summer holiday period.

Work will now focus on the standardisation of locum booking procedures across the Trust and ensuring that on-call managers are given guidance for different scenarios they may encounter out of hours as to whether a locum would need to be booked in each case or if there is an alternative way of covering the gap that would maintain safety and quality.



APPENDIX B

Omitted drugs - Antibiotics Omitted drugs - Non-antibiotics								Safety			> 10% > 12.5%	5-10% 7.5-12.5%	≤ 5% ≤ 7.5%
	Apr 11	**May 11**	**Jun 11**	**Jul 11**	**Aug 11**	**Sep 11**	**Oct 11**	**Nov 11**	**Dec 11**	**Jan 12**	**Feb 12**	**Mar 12**	**YTD**
Antibiotics	5.9%	5.8%	5.6%	4.8%	4.9%								**5.4%**
Non-ABX	11.9%	12.1%	12.0%	11.1%	11.2%								**11.8%**

The rate of omitted antibiotic doses fell from 5.6% in June to 4.8% in July and increased to 4.9% in August. The rate for non-antibiotics fell from 12.0% to 11.1% in July and increased to 11.2% in August. These are the lowest monthly rates of omissions seen to date and the only months that the Trust-wide rate for antibiotics has been below the 5% threshold.

Executive RCA meetings took place in August for Divisions A and B. Within Division A the need to remind staff to use the drop-down reasons for omissions rather than free-text was identified to allow them to be audited. Preparatory work for the roll-out of PICS to Ambulatory Care was also considered. The Division B meeting identified the need for guidelines for patients who are nil by mouth to ensure consistency. It also identifed the need to adapt medication administration to patients' individual needs to reduce the chances of patients refusing drugs.