

AGENDA ITEM 07

**PATHOLOGY SERVICES TRANSFORMATION BOARD
MEETING
PSB4 / 29 JULY 2010 / FOR INFORMATION**

Key Performance Indicators Summary Report

Following the Board decision to engage all stakeholders for the development of key performance indicators (KPIs) for the future pathology services, the local health economy was approached to suggest suitable and appropriate KPIs over a two week period.

An email was sent out to the Chairs of the Board to cascade to all relevant stakeholders. Other Board members were also asked to disseminate to interested parties. It was advised that all KPI suggestions should:

- be output or outcome based rather than input based
- be acceptable, specific, measurable and easy to understand
- have a suitable and relevant rationale to support their use
- have suggestions for potential thresholds i.e. targets for the KPI

All stakeholders were asked to submit suggestions by Wednesday 21st July 2010. All suggestions have been captured and tabulated in this paper.

The Board is asked to review the suggestion and propose next steps.

KPI Suggestions

Name	Organisation	Suggestions
Danielle Freedman	Luton and Dunstable Hospital	See Appendix A
Eilish Midlane	East & North Herts. NHS Trust	<ul style="list-style-type: none"> • Turnaround of critical analysis: U/E, FBC, Troponin, INR, Blood Gas • Turnaround for non-urgent analysis of core diagnostic tests, eg LFT, Hormones, lipids, etc • Up-time availability of IT, eg Laboratory information systems, Order Communications Software. • Performance against the 2 week Cytology screening target eg > 98% within 2 Weeks • Access to Phlebotomy: Walk-in service with 2 hours, appointments within 2 weeks • Sample collections: Minimum of one sample pick-up per working day. • Access to results by next working day for all GP practices (Define any exclusions) • Access to Consultant advice: Urgent within 30 minutes and non-urgent within 2 hours. • Pathologist attendance at MDTs. • Demand management: Measurable reduction in tests by 0.1% pa • Blood Management: Blood wastage <8%, Blood conservation with reduction in issues by 0.1% pa • Training of BMS staff: Define ratio of training to qualified posts and define expected output of newly qualified BMS's per year. • Staff turnover <10%, Appraisal >90%, Mandatory Training >90% • Compliance with CPA, HTA, MHRA • Evidence of laboratory audit and self assessment. • Budgetary Control: Out-turn within 5% of budget allocation for predicted activity.
Jo Whittaker	Cambridge University Hospitals	See Appendix B
John Livermore	Colchester Hospital University	See Appendix C
Athar Ahmed	Queen Elizabeth Hospital	1. performance indicators: The histopathologists at QEH service many tumour-specific MDT meetings and their is no doubt in my mind that we would sustain a significant increase in breeches to our 2 week and 62 day cancer pathways if our service were centralised; specifically,

		<p>pathology-related information not infrequently emerges between MDT meetings which allows clinical teams to progress the pathways for a significant number of patients (i can provide examples if required)</p> <p>2. user satisfaction; colleagues value very much the ability to pick up the phone and discuss complex cases with the pathologists here</p>
Julian Jolly	West Suffolk Hospital	<ul style="list-style-type: none"> • Histopathology: Cancer targets • All Pathology disciplines: Productivity figures (eg Keele benchmarking data) • All Pathology disciplines: Cost per test figures (eg Keele benchmarking data) • All Pathology disciplines: Turn around times: urgent non urgent requests • Haematology: Coagulation (eg Dawn benchmarking data) • Blood transfusion: traceability, %O neg stock, % incidents closed within 30 days, wastage • All Pathology disciplines: NEQAS data • All Pathology disciplines: User involvement (eg Keele benchmarking data) • All Pathology disciplines: Accreditation
Dianne Gibson	Norfolk and Norwich University Hospital	See Appendix D Part 1& 2
Ilga Chakrabarti	Camping land Surgery,	<p>accurate results(with normal ranges to help interpretation)</p> <p>-good access to patients</p> <p>-timely results</p> <p>-full provision of modern pathology tests for appropriate situations</p> <p>-availability of round- the -clock clinical advice/discussion of difficult cases</p> <p>- high standard processing of samples to avoid losing/perishing /duplication of tests</p> <p>-good IT connections across the county to access results of tests requested by colleagues in various settings</p>
Margaret Daly	Cambridge University Hospitals	<ul style="list-style-type: none"> • Turn round times • Quality assurance • Accessibility • Clinical outcome measures • User satisfaction
Claire Jay	Suffolk Pct	<ul style="list-style-type: none"> • simple visual display of on usage over a period of time say past two years with the current year • Highlights were demand is different in different areas and where demand appears not to have significant clinical reason
Donald McGeachy	Mid Essex Pct	<ul style="list-style-type: none"> • KPI's around the reporting of data since currently we have no way of making comparisons of use of path tests at practice or individual GP level
Tony Moore	Basildon and Thurrock University Hospitals	See Appendix E

Appendix A

Performance indicator	Proposed measurement	Green	Amber	Red
Provision of clinical advice.	Percentage of days on which no request for clinical advice has taken more than 30 minutes to answer or return call – covers 24hr period.	>97%	93 – 97%	<93%.
Samples with delayed analysis.	Percentage of days on which less than 5 patient samples have tests for core investigations (U&E, LFT, FBC etc) outstanding from the previous day. Suggest measurement at 10 am.	>97%	93 – 97%	<93%
Staffing	Number of days per month, which the numbers of qualified staff in the laboratory are above a defined threshold.	≥90%	81 – 89%	≤80%
Policy implementation	Percentage of staff who have read and signed an SOP within 30 days of publication	>95%	91 – 94%	<90%
POCT equipment	Number of days when all blood gas machines / critical pieces of POCT equipment (to be defined, but including satellite labs) are fully operational.	>95%	86 – 94%	<85%
A&E turnaround	Percentage of samples completed within 1hr for core investigations (renal function, LFT, FBC etc).	>98%	95 – 97%	<95%
Ward patients	Percentage of routine inpatient requests for core investigations (renal function, liver function, full blood count etc) completed within 3 hrs	>98%	91 – 98%	≤90%
Referred investigations	Percentage of referred samples resulted within 2x the expected turnaround time.	>95%	91 – 94%	<90%
Avoidance of repeat investigations	Number of patient samples that are resulted as unsuitable or require repeat due to delays in transit / testing / lab error.	<1.3 x Trust baseline data.	1.3 – 1.5 x Trust baseline data	>1.5 x Trust baseline data
Number of complaints	% of complaints from users or patients that investigation shows no laboratory error to have occurred.	>80%	71 - 80%	≤70%
Unnecessary phone calls	Number of phone calls from GP practices for results that have been reported electronically.	<10 per day	11 – 19 per day	≥20 per day.
Patient pathway	Number of occasions a result from a GP is not available to a clinician in secondary or tertiary care if required.	Will need debate across region to decide thresholds and ease of measurement.		
MDT meetings	Number of scheduled MDT meetings per month attended by pathology staff.	>97%	95 - 97%	<95%
Errors	Number of errors / incidents /	<5%	5 – 14%	≥15%

	complaints investigated where a report has been issued and: a). An identifiable pre-analytical error has not been spotted by the laboratory b). An error has occurred within the laboratory.			
Cellular pathology diagnostic census	Workload reported within 6 weeks	100%	≥90%	<90%
Cellular pathology turnaround	Monthly average turnaround times of 8 days or less	100%	≥80%	<80%
Cellular pathology macroscopic examinations	Percentage of specimens processed daily.	100%	≥80%	<80%
Cellular pathology preparation of microscopic examinations	Percentage of blocks sectioned and stained daily.	≥99%	80 – 98%	<80%
Mortuary capacity	Percentage of occasions on a Friday when greater than a defined number of trays are available for a weekend.	100%	≥80%	<80%
Antenatal screening	Percentage of haemaglobinopathy samples resulted within 3 days.	≥99%	95 – 98%	<95%
MRSA turnaround	Percentage of samples reported within 24 hours	>95%	85-95%	<85%
C.Diff turnaround	Percentage of Samples reported within 18 hours	>95%	85-95%	<85%
CSF microscopy	Percentage of specimens reported within 2hrs	>95%	85-95%	<85%
TB smear turnaround	Percentage of samples reported Within 24 hrs	>95%	85-95%	<85%
HIV viral load TAT	Percentage of samples reported within 4 days	>90%	80-90%	<80%

Appendix B

CUHFT PATHOLOGY PERFORMANCE SUMMARY		Acceptable range	2010/11 Target
Quality Theme	Service Measure		
1. Patient Identification	BARS compliance for blood collection	99-100%	100%
	Use of PBARS at bedside	90-92%	92%
2. Blood Culture Contamination	BC contamination rate	4-5%	4%
3. Critical Value Reporting	CV reporting rate (% of total phoned)	95-100%	100%
4. Order Accuracy	GP tests ordered & not received	5-6%	5%
5. Turnaround Times per Dept	Urgent Creatinine TAT <1 hour	80-85%	85%
	ED Creatinine TAT <1 hour	80-85%	85%
	ED Haemoglobin TAT <1 hour	85-90%	90%
	ED D-Dimer TAT <2 hours	80-85%	85%
	Papworth BSL Creatinine TAT <2 hours	80-90%	90%
	Papworth BSL Haemoglobin TAT <2 hours	85-90%	90%
	Papworth BSL Prothrombin TAT < 2 hours	90-95%	95%
	Histo Diag cases TAT <48 hours	80-85%	85%
	Histo Reporting TAT <48 hours	30-35%	35%
	MRSA TAT <30 hours	93-95%	95%
	C.Diff TAT <8 hours	93-95%	95%
	Cytology smears reported in 2 weeks	95-100%	100%
	Tissue Typing HLA-B27 <14 days	95-100%	100%
	Cytogenetics urgent bloods in 14 days	90-100%	100%
Molecular Genetics routine in 14 days	85-90%	90%	
6. Specimen acceptability	Tests repeated	1-2%	1%
7. Anatomic Pathology Discrepancies	Reports amended after MDT review	2-5%	2%
8. Blood Product Wastage	Units of blood wasted	2-3%	2%

9. Analytical Quality	Score for Routine Assays	71-100	101
	Score for Endocrine Assays	71-100	101

Appendix C

Item	Contracted (Y/N)	Indicator	Definition	Target	Unit of measurement	Frequency of measurement
		Sample collection				
		Electronic requesting	There is a system to electronically link Pathology requesting from the requestor to the laboratory to eliminate errors to ensure: right patient, right sample, right request, result returned to right place and there is a record of results being acknowledged by the requestor that may be seen by the lab staff to ensure correct handover for patient care.	100% of requestors	number of electronic requests divided by total number of requests	Yearly
1a		Wait time at phlebotomy centre	The average time from patient arrival to having blood collected.	30 mins	Minutes	Monthly average
1b		Number of people attending centre	The total number of people attending the Phlebotomy centre each day (average)	TBA	Number of people	Daily
1c		Long wait	The number of people waiting more than 30 minutes. This does not include those attending for dynamic function tests such as GTT.	>30 mins	Number of people	Monthly average
1d		Time from collection to lab	The time taken from sample collection to time of receipt in the lab	<4 hours	Hours	Monthly average
1e		Number of collections	The number of collections from GP surgeries each day		Contract	
1f		Sampling errors	The number of incorrect samples received in the lab for analysis - wrong tube	0	Requests	Monthly
1g		Sample tracking	The number of samples that are tracked from collection point to laboratory with audit trail.	100%	% tracked divided by total samples as percentage	Monthly
		Sample receipt				
2a		Order entry accuracy	The number of errors made when patient information, requestor and tests are input in the pathology information system	0	Requests	Monthly
		Sample unacceptable	The number of samples received without sufficient information of at least 3 unique	0	Samples	Monthly

			identifiers			
Lab data						
		Total number of Chemistry tests - Hospital	Using Keele Benchmarking definitions		tests	Monthly
		Total number of Chemistry tests - GP	Using Keele Benchmarking definitions		tests	Monthly
		Total number of Haematology tests - Hospital	Using Keele Benchmarking definitions		tests	Monthly
		Total number of Haematology tests - GP	Using Keele Benchmarking definitions		tests	Monthly
		Total number of Microbiology tests - Hospital	Using Keele Benchmarking definitions		tests	Monthly
		Total number of Microbiology tests - GP	Using Keele Benchmarking definitions		tests	Monthly
		Total number of Histology requests - Hospital	Using Keele Benchmarking definitions		Requests	Monthly
		Total number of Histology requests - GP	Using Keele Benchmarking definitions		Requests	Monthly
		Total number of Cytology requests - Hospital	Using Keele Benchmarking definitions		Requests	Monthly
		Total number of Cervical cytology requests - GP	Using Keele Benchmarking definitions		Requests	Monthly
		Amended reports	The number of reports changed after the original report was issued to the requester.		Number	Monthly
		Amended reports	The number of reports changed after the original report was issued to the requester, as a percentage of the total number of reports		%	Monthly
		Total Turn round times	The time taken from sample collection to release of report from lab.	Variable according to test	Minutes/ Hours/Days	Monthly
		Laboratory turn around times	The time taken from sample receipt in the lab to release of report from the lab.	Variable according to test	Minutes/ Hours/Days	Monthly

		Total Turn round times - Urgent samples	The time taken from sample collection to release of report from lab for urgent requests.	Variable according to test	Minutes	Monthly
		Sample spoilage	The number of repeat samples requested by the lab due to sampling error	0	Requests	Monthly
Result access						
		Telephone response	The time taken for the results line phone to be answered	10 seconds	Seconds	Random, weekly
		Telephone support response	Access to clinical support for interpretation of results and clinical advice	TBA	Seconds, minutes	Random, weekly
Lab performance /governance						
		Staff appraisal	The number of staff having had appraisal with the last 12 months	100%	%	Monthly
		State registration	The number of Biomedical Scientists and Clinical scientistst that have current state registration	100%	%	Yearly
		Accreditation	The laboratory is accredited by an outside scheme to practice	Full accreditation, Conditional accreditation.	Certification	Yearly
		External Quality Control	The laboratory can provide a list of all external QC schemes in participates in and can demonstrate acceptable performance	Performance scores must be within 2SD for blood sciences. Microbiology scores must be acceptable such that letters to explain poor performance are issued.	NEQAS report summary	Yearly
		Consultant lead	Each pathology discipline has a clinically qualified head of department	Yes	CV	Yearly
Financial						
		Budgetary control	The service can demonstrate financial control such that services are provided within limits	Breakeven (£ TBA at budget setting)	Budget statements	Yearly
Point of care testing						
		POCT support provided by POCT committee	There is a POCT committee to co-ordinate and make decisions for the type of equipment and disposables used	yes	Contract	Yearly

		POCT equipment is maintained	All POCT equipment is maintained by pathology trained staff	100%	instruments maintained divided by total no of instruments as %	Yearly
		POCT equipment is calibrated	POCT equipment is calibrated by trained pathology staff	100%	instruments calibrated divided by total no of instruments as %	Yearly
		POCT equipment interfaced	POCT equipment is interfaced to the laboratory system for validation and storage of results. Results are fed electronically into GP system.	100%	instruments interfaced divided by total no of instruments as %	Yearly
		Staff trained in POCT	Staffs using POCT are trained by Pathology staff in the correct use of equipment and the limitations of testing.	100%	staff with yearly certification of being trained divided by no of staff using equipment	Yearly
		QC of POCT	Quality control of equipment is provided and supported by Biomedical Scientists	yes	Contract	Yearly
		POCT support for purchasing, appraisal, validation	POCT purchasing decisions are supported by Pathology and equipment is validated against gold standard analysers	yes	Contract	Yearly

Appendix D (Part 1)

- The Pathology services must support the clinical services offered by the hospital / Trust e.g. NSF's, level of critical care, Emergency services
- These are high level KPI's and depending on what form of design the SHA develops for Pathology services, it is likely that more detailed KPI's will need to be developed around specific areas of the service
- Once all of the responses have been reviewed and collated it is important that they are put out for consultation to Chief Executives and the Pathology Community with a reasonable timescale for consideration and response
- Not all of these KPI's will be appropriate for all elements of the service.
- At this point in time it would not be appropriate to define the threshold levels for measurement of KPI's, this cannot be done until such time as the EoE service has been designed and scoped.

KPI – Aspect of Service Quality	Measure / Evidence (examples)	Threshold (To be agreed)
QUALITY		
Transport		
Regular and appropriate transport systems where samples are moved from one location to another	Agreed delivery routes / schedules	Y/N
Ensure collection times / frequency meet the requirements of the users	User questionnaire	Y/N
Regular and appropriate transport systems where blood products are moved between locations	Agreed schedules and temperature controls	Y/N
Provision of transport containers that meet the sample transport regulations and ensure correct storage whilst in transit	Evidence of suitable containers	Y/N
Appropriately trained and competency assessed drivers and couriers	Drivers logs, training records, competency assessment	Y/N
Management of time dependant tests (Potassium, PTH, Bilirubin etc) and delivery within appropriate time scale	Audit of delivery time and adherence to programmed schedules	Number of breaches
Information on sample storage	Detail provided in User handbook	Y/N
Analytical Aspects of Service		
Adequate numbers of appropriately trained staff	HPC / GMC registration Evidence of Annual validation of portfolio Annual appraisal documentation Evidence of registration with a recognized CPD scheme Training program documented Turnaround times met Analysis of workload per WTE (as per Keele Benchmarking) Sickness rates	Number or percentage of staff number

<p>Sufficient numbers of appropriate analysers for workload</p> <p>Use of clinically / technically validated assays</p> <p>Adoption of relevant National Reference ranges</p> <p>POCT Committee with authority to regulate all POCT within Trust</p> <p>Support for POCT services outside the Trust</p> <p>Audit Evidence of formal audit program</p>	<p>Overtime payments / lieu time</p> <p>Standardised equipment procurement</p> <p>Equipment replacement program</p> <p>Purchase of Manufacturers preventative maintenance program with 24 hour support</p> <p>Evidence of regular user maintenance</p> <p>Turnaround times met</p> <p>Records of method development and testing</p> <p>CE Marking</p> <p>Adopt appropriate national reference ranges when available</p> <p>Minutes from meetings</p> <p>SLA with agreed levels of support</p> <p>Audit records with evidence of remedial, corrective and preventative actions</p>	<p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Time scale</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p>
<p>INNOVATION</p> <p>User Satisfaction</p> <p>Production of user surveys</p> <p>Regular meeting with user groups (Path Users Committees)</p> <p>E forum for users to make suggestions or requests for change</p> <p>Log and respond to written complaints</p> <p>Training</p> <p>Provision of advice, training and support to users outside the lab e.g. POCT</p> <p>Succession planning to ensure medical and scientific staff match requirements for service delivery</p> <p>Evidence on ongoing effective staff training</p> <p>Accredited training laboratory</p> <p>Training Manager in Post</p>	<p>Annual electronic user surveys</p> <p>Minutes of meetings</p> <p>Monitor site, follow up actions documented and publish response</p> <p>Document</p> <p>Training logs</p> <p>Evidence of investment in staff training programs at all grades</p> <p>Departmental training policies</p> <p>Documentation</p> <p>Job Description for named individual</p>	<p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p>

<p>Research & Development Ongoing Research program</p> <p>Appropriately experienced and qualified staff to support the organizations research ambitions</p> <p>Participation in and support for Clinical Research trials</p> <p>Collaboration with Universities, Research institutions and participation in studies</p>	<p>Publication of papers in journals</p> <p>CV's personnel files</p> <p>Minutes of meetings, documents, SOP's</p> <p>Minutes of meetings, joint publications</p>	<p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p>
<p>PRODUCTIVITY</p> <p>IM&T Full reliable, secure IT connectivity</p> <p>Full interconnectivity between provider / receiver labs</p> <p>Interactive IT requesting to alert to duplicate tests</p> <p>Ease of access for users to advice and information</p> <p>Samples / Requests Provision of appropriate consumables for use in requesting and testing e.g Sample containers, request forms</p> <p>List of tests available and samples required</p> <p>Provision of sample labeling minimum data set</p> <p>Provision of advice / training in appropriate sample handling / separation</p> <p>Defined circumstances for repeat testing</p> <p>Agreed profiles with specialties</p> <p>Pre-admission profiles for GP's</p> <p>Costs Published test costs</p> <p>Performance Management Achievement of mandatory</p>	<p>Electronic requesting and reporting for all users</p> <p>Electronic data links, web browser</p> <p>Users able to review previous results before placing request</p> <p>User handbook, lab tests online</p> <p>Tracking of orders and delivery of consumables</p> <p>User Handbook electronic / paper</p> <p>Audit number of rejected samples</p> <p>Audit number of failures leading to repeat request. Training records</p> <p>Audit of agreed standards</p> <p>User-specific agreed test profiles in electronic requesting</p> <p>Baseline profiles agreed and regularly reviewed / updated</p> <p>Variance from national tariff</p> <p>Audit against targets, investigate failures, report corrective, remedial</p>	<p>Number or percentage users</p> <p>Number or percentage users</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Number / percentage</p> <p>Number / percentage</p> <p>Number of failures</p> <p>Y/N</p> <p>Y/N</p> <p></p> <p>Number / percentage</p>

turnaround time targets e.g. national screening programs	and preventative actions	
Achievement of turnaround times agreed with users	Set targets for each discipline and level of urgency and audit against agreed targets NB separate project already ongoing to define discipline specific turnaround times, which feeds into here	Number / percentage
Availability of results for patients attending clinics	Audit	Number or percentage
PREVENTION		
Results		
Accurate and appropriate results available in a timely fashion	Quality and safety metrics, agreed measurement criteria	Numbers
Ease of access to results	Electronic / paper audit delivery	Number / percentage
Provision of helpful / relevant interpretive comments	Evidence User surveys are responded to	Y/N
Agreed criteria for reflex testing	Standard operating procedures	Y/N
Alerts to Results sent electronically to users mailbox	Use of ICE mail or other electronic means	Y/N
Clinically urgent findings reported to user e.g. high INR, Potassium, CSF gram stain and culture, cultures from sterile sites, blood cultures	Telephone logs / email	Y/N
Results delivered in clinically relevant timescale	Audit time from result available to contact with requester (not turnaround time)	Number / percentage
Results acted upon	Audit of percentage results viewed on receipt	Number or percentage
Phlebotomy		
Availability of adequate numbers of trained phlebotomists	Audit Phlebotomy waiting times, training records, numbers of patient incidents reported	Numbers
Correct containers used / samples taken	Audit number of repeats due to specimen errors	Numbers / percentage
SAFETY		
Medical / clinical support		
24/7 availability of clinical advice by Consultant Clinical Biochemist	Rotas, patient outcome	Y/N
24/7 Consultant Microbiologist support to provide integrated diagnostic, clinical, infection control and health protection advice to improve patient outcomes e.g. provision of advice on positive blood	Rotas, logs of calls, patient outcome measurements	Y/N

<p>cultures</p> <p>24/7 availability of Consultant Hematologist for review of clinically urgent blood films e.g Malaria, acute leukaemia</p> <p>Evidence of consultation with colleagues / external experts in difficult or rare cases</p> <p>Evidence of Clinical Leadership</p> <p>Microbiology Consultant available to participate and advise on ward rounds e.g. ITU, Haem, Paeds</p> <p>Consultant participation and attendance at MDTs</p> <p>Audit Clinical outcomes</p> <p>Provision of staff education within and external to the Trust e.g. Medical School, Community, GP's</p>	<p>Rotas, patient outcome</p> <p>Patient reports, letters, telephone logs</p> <p>Head of Department Job Description</p> <p>Patient outcomes, evidence of infection control measures</p> <p>Patient outcomes</p> <p>Documentary evidence, HSMR, compliance</p> <p>Training notes, presentations</p>	<p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p> <p>Y/N</p>
<p>Discipline Specific Measurements Blood Transfusion Traceability rates</p>	<p>MHRA require 100% traceability – continuous audit</p> <p>Documentary evidence</p>	<p>Percentage</p> <p>Y/N</p>
<p>Reporting and investigation of all adverse events and near misses to local risk management, SHOT and MHRA via SABRE</p> <p>Participation in blood stocks management scheme</p>	<p>Quantitative measurements Red Cell wastage <1% Platelet wastage <15% O new blood used as a % of issue <12%</p>	<p>Percentages</p>
<p>Microbiology Evidence of compliance with public health duties of NHS labs for - Communicable disease surveillance, Antimicrobial resistance surveillance Enhanced surveillance and notification to health protection unit</p>	<p>CDR returns, record of contribution to surveillance schemes and compliance with SLA with Health Protection Unit</p>	<p>Y/N</p>
<p>Laboratory / diagnostic services to support integrated clinical, infection control and health protection services e.g. Meningococcal meningitis – gram stain, culture and pcr results influence management, treatment and isolation of patient</p>	<p>Time to results and to action, such as Isolation, formal review of antibiotic therapy, public health actions</p> <p>Evidence that pathway is followed and influences outcome for patients and public</p>	<p>Measured</p>
<p>Adherence to national guidelines for C Difficile testing, results and</p>	<p>Audit of Patient outcomes</p>	<p>Numbers</p>

isolation	Turnaround times, Consultant availability. A&E admissions	Numbers or percentage
Clinical Biochemistry Provide a rapid diagnostic service for A&E to enable assessment for immediate discharge or admission	24/7 opening times of Laboratory, evidence of technical and clinical availability. Patient outcomes	Y/N
Deliver 24/7 assessment of electrolyte, fluid and acid/base balance for all patients supported by appropriate clinical advice	Audit results availability at OPD clinic	Numbers or percentage
Provide agreed diagnostically relevant investigations of patients to allow full assessment at first OPD appointment	Evidence of diagnostic pathways, turnaround times	Y/N
Provide an appropriate diagnostic service to Paediatrics, which has been agreed, to allow rapid diagnosis of metabolic conditions	CPA report / website	Y/N
Accreditation and QA Possession of full CPA accreditation N.B. CPA standards contain many quality measures that are implicit within the accreditation process	MHRA report	Y/N
MHRA compliance	Documentary evidence of satisfactory performance	Y/N
Enrolment in EQA schemes for all investigations performed by laboratory. Evidence of satisfactory performance in those schemes	Poor performance letters – evidence of remedial action	Y/N
Comprehensive IQC program which demonstrates satisfactory daily performance and evidence of remedial actions as necessary	QC charts, equipment logs, Error logs	Y/N
Quality Manager in post	Job description of named individual	Y/N
Risk Register	Documentary evidence risks are logged and managed	Y/N
Lab Clinical Governance committee	Minutes of meetings	Y/N
Reporting mechanism within Trust	Evidence of reporting structure and accountability	Y/N
Error Logging Evidence of an internal error logging system with remedial, corrective and preventative actions	Error logs	Y/N
Evidence of incident reporting system e.g. DATIX	Incident logs	Y/N

Appendix D (Part 2)

KPI	Measure/Evidence	Threshold
Generic		
Possession of full CPA accreditation	CPA report/website	Y/N
Achievement of mandatory turnaround time targets (TATs): Cytology (Gynae)	14 day end-to-end, including HPV testing. Monthly monitoring, Divisional and Trust Board	95%
Achievement of Cellular Pathology reporting TATs: Level 1 Frozen sections Intra-operative sentinel lymph node imprints One-stop FNA clinics	Within 1 hour Electronic data reports	100%
Level 2 Transplant biopsies Moh's surgery specimens	Within 6 hrs Electronic data reports	90%
Level 3 Urgent/same day Bx (without complete IHC) Non-gynae cytology	Within 24 hrs Electronic data reports	90%
Level 4 In-patient Bx/non-gynae cytology (with complete IHC) Surgical resection specimens (urgent)	Within 72 hrs Electronic data reports	90%
Level 5 Surgical resection specimens (routine) Gynae cytology	Within 1 week Electronic data reports	90%
Level 6 Specialist external referrals Highly complex cases Decalcification specimens Adjunctive molecular testing	Within 2 weeks Electronic data reports	90%
2 week wait cancer surgical specimens	<1 week Electronic data reports	100%
Diagnostic waiting times surgical specimens N.B Bone, nail samples have lengthy preparation times	<6 weeks Electronic data reports	99.5%
Participation in external inspections and accreditation visits e.g. Regional QA, Cancer Peer Review, HTA.	All actions to be completed within recommended timescales	100%
Availability of reports electronically to users	User surveys, CPA user meetings	100%
All medical and non-medical staff receive an annual appraisal/performance review	Personnel files	100%
All medical and non-medical staff complete annual and bi-annual mandatory training (H&S – Fire, Risk, Manual Handling etc)	Training records – department and trust	100%
Laboratory		
Participation in UKNEQAS Schemes as relevant to laboratory repertoire	No more than 1 poor performance letter from EQA provider per annum, for routine, special stains,	100%

	and Immunocytochemistry	
Documented evidence of an internal error logging system with mechanisms for corrective and preventative action	Error log Error log/ Incident/Audit finding Clearance reports	Y/N
Documented evidence of an incident reporting system with mechanisms for corrective and preventative action	Incident reports Error log/ Incident/Audit finding Clearance reports	Y/N
Biomedical Staff -achievement of at least the minimum HPC CPD requirements	Portfolios, Appraisal documentation, departmental training records, HPC registration records	Y/N
Evidence of consultation with service users and of responding to changing needs	At least annually	Y/N
Medical		
Documented availability of consultant clinical advice 24 hours per day, 365 days per year	Log document	Y/N
Achievement of at least the minimum RCPATH CPD requirements	CPD portfolio files	100%
Participation in relevant EQA Schemes with demonstrable individual satisfactory performance	Certificates	100%
Histopathologist representation at 100% of cancer MDT meetings	Attendance recorded for Cancer Peer Review, recorded by MDT Co-ordinator	Y/N
Clinically important unexpected findings notified to requesting clinician	Gynae – Discordant results following production of teaching material, supplementary report and letter to clinician. Histopathology and non-gynae cytology - Within 24 hours of reporting	Y/N
Evidence of consultation with external experts for difficult or rare cases	Additional reports, Send-away slide/block records, and documented Referral Policy , CPA compliance	Y/N
Evidence of an internal pathologist reporting error logging system with openness and shared learning from mistakes coupled to mechanisms for corrective and preventative action	Electronic or paper logs, monthly governance meetings with outcomes documented, incident reports	Y/N
Evidence of a systematic and relevant programme of clinical audit including performance against accepted national reporting standards such as RCPATH minimum datasets	Audit documentation, planned and completed	Y/N

Appendix E

Biochemistry	Description	Monitoring Frequency	Target
	Test turnaround times (A&E Na)	Monthly	95% within 60 minutes (of ENR)
	Test turnaround times (MAU Na)	Monthly	90% within 60 minutes (of ENR)
	Test turnaround times (Med.Inp. Na)	Monthly	90% within 90 minutes
	Non-core (8pm to 8am) Test turnaround times (A&E Na)	Monthly	95% within 60 minutes of ENR
	Test turnaround times (GP TSH)	Monthly	90% within 300 minutes
	Test turnaround times (MAU TropT)	Monthly	90% within 60 minutes
	Monitor Telephoning of Results outside Critical Limits	Monthly	95%
	Monitor Recording of Recipient Initials/Location of Telephoned Results	Monthly	95%
	Monitor Error Log Records for trends in number and section	Monthly	50% of (errors reviewed) closed
	Monitor EQA Log Records for trends in number and analytes	Monthly	50% of (new errors reviewed) closed
Haematology	Description	Monitoring Frequency	Target
	Traceability of Blood products (MHRA requirement)	Monthly	99.50%
	Wastage of red cell blood units through time expiry	Monthly	0.20%
	Consistently recording the identity of ward staff phoned with abnormal results	Monthly	95%
	Test turnaround times (A&E FBC)	Monthly	95% within 60 minutes of ENR
	Test turnaround times (MAU D-Dimer)	Monthly	90% within 90 minutes of ENR
	Test turnaround times (CCCO APTTs)	Monthly	90% within 60 minutes of ENR
	Test turnaround times (WARFI)	Monthly	90% within 90 minutes of ENR
	Sample delivery times (WARFI)	Quarterly	90% within 5 hours of Phlebotomy
	Test turnaround times (Urgent red cell issues within 60 minutes of ENR)	Monthly	90% within 60 minutes of ENR
	Test Turnaround times (Antenatal Hb variant screen)	Quarterly	Within 3 working days
Microbiology	Description	Monitoring Frequency	Target
	C. difficile toxin average turnaround time	Monthly	90% within 2 days of ENR
	Gentamicin levels turnaround time	Monthly	90% within 60 minutes (of ENR)
	MRSA Screen average turnaround	Monthly	90% within 3 days of

			ENR
	Urine Culture & Sens Average Turnaround	Monthly	90% within 3 days of ENR
	Vancomycin levels average turnaround time	Monthly	90% within 60 minutes (of ENR)
	Monitor inhibition rates for Herpes simplex PCR	Monthly	Less than 5 % inhibition
	Monitor inhibition rates for Chlamydia NAATS	Monthly	Less than 5 % inhibition
	Monitor NEQAS reports for errors	Monthly	< 2 errors
Cell Pathology	Description	Monitoring Frequency	Target
	Monitor turnaround times for gynae cytology	Weekly	14 days (by 2010)
	Test turnaround times histology results	Monthly	90% in 5 days
	Monitor Error Log Records for trends in number and section	Monthly	75% reviewed and closed
	Monitor EQA results	Monthly	75% reviewed and closed
	Monitor TAT for time from coroner authorisation to PM performed	Monthly	100% within 7 days

All Disciplines	Description	Monitoring Frequency	Target
	Number of tests outstanding at 6 weeks	Quarterly	0
	Appraisal conducted within 13 months	Monthly	80%
	H&S Fire training completed within 13 months	Quarterly	95%
	Manual Handling training completed within 13 months	Quarterly	95%
	Monitor Departmental absenteeism rate	Monthly	4%