



University Hospitals Birmingham  
NHS Foundation Trust



Quality Account 2017/18

Additional Clinical Audit Information

## Quality Report 2017/18

### Appendix: Additional Clinical Audit Information

#### National Clinical Audit

The reports of 16 national clinical audits were reviewed by the provider in 2017/18 and UHB intends to take the following actions to improve the quality of healthcare provided:

Audit Title	Outcome
Heart Failure	Issues with case ascertainment have been addressed.
National Audit of Breast Cancer in Older Patients	Compliant.
National Oesophago-Gastric Cancer Audit - Clinical Outcomes	Compliant.
Falls and Fragility Fractures Audit Programme	Compliant.
National Prostate Cancer Audit	Compliant.
National Joint Registry	Compliant.
National Diabetes Inpatient Audit	Compliant.
National Diabetes Footcare Audit	Compliant.
National Lung Cancer Audit	UHB does not meet the national minimum standard for 90% of patients to be seen by a lung cancer CNS, however this relates to previous years and CNS availability has been increased since then and UHB have improved in this area.
Sentinel Stroke National Audit Programme (SSNAP)	Compliant.
National Emergency Laparotomy Audit (NELA)	Compliant except for presence of consultant anaesthetists during surgery. This is felt to be a data quality issue and new measures have been taken to improve in this area.
Ophthalmology (Cataracts)	Compliant.
National COPD Audit	Mostly compliant. Still ongoing work to improve quality of data submitted to this new audit.
National Congenital Heart Disease Audit (NCHDA)	Previous data quality issues addressed with protected time for audit submission.
National Learning Disability Mortality Review Programme	Compliant.
National Diabetes Insulin Pump Audit	Work underway to improve participation.

## Local Clinical Audit

Over the financial year 784 clinical audits were registered with the provider: of these 159 were completed and reports reviewed by the provider. At UHB, staff undertaking clinical audit are required to report any actions that should be implemented to improve service delivery and clinical quality to the Clinical Risk & Compliance department via an electronic recording system. Examples of specific actions reported are shown in the table below:

Specialty	Audit name / title	Key actions following the audit
Acute Medicine	Handover initiative	To change handover, so all nurses no matter the grade receive handover together. This will take part in each of the designated areas on the unit, at the start of every shift. Through this change it will help improve communications between staff members, leading to improved patient care and better team moral. This will be fully in place by August 2018. The trial will take place in May after we have gained feedback and ideas through our first questionnaires in April.
	DVT secondary care referral standards	A single page guidance document for community health care providers on the use of a the rapid access DVT service to minimize cost to the commissioning group and improve patient management Retraining of community phlebotomy services – ideally would require a re-audit with referral location data collected to better allocate training needs
Anaesthetics	Audit of Stop Before You Block compliance in regional anaesthesia	Increase awareness: departmental cultural change, SBYB posters in anaesthetic rooms, ODP empowerment to prompt Better anaesthetic documentation: stickers vs new anaesthetic charts/WHO checklists. New anaesthetic charts currently being trialled and will be introduced in the coming months. Re-audit once new charts are in place
	Audit of TEG 5000 Validity in Cardiac Theatres	This contributed to the business case for TEG 6
	Audit of non-physician delivered upper limb regional anaesthetic block	PA(A)s continue to deliver an effective service, and local anaesthetic volumes used are similar to their consultant supervisors.
	Assessing Use of Neuromuscular Monitoring in Anaesthesia	No further audit required of NMT availability as now universally available. Decision for (non-)use rests at clinician level.
	Opioid Disposal Audit	Circulation to anaesthetic staff of opioid disposal guidance. Consider availability of blue sharps bins in places of anaesthesia or use of alternatives. Possible discussion of the current policy within the department prior to re-audit
	CSF	Clarify with surgeons that a 24 hour time window is still appropriate due to changes in senior workforce Circulate agreed guidelines to CEPOD and neurosurgery emergency teams to ensure continued timely access to theatre for this recognised complication of anterior skull base surgery Plan to re-audit after further 2 years
	Assessing use of Neuromuscular Monitoring in Anaesthesia	Increase number of NMT monitoring modules through increased delivery of new anaesthetic machines. Further education to promote use - Audit meetings, email.
	Preoperative Anaesthetic Assessment of Cardiac Surgical Patients	Provision for obtaining Clinical Notes in terms of office space, manpower and ease of access of the system must be made. This was left open, subject to discussion within the Cardiac Anaesthetists' Group. The suitability of an electronic record similar to "Health Screening Questionnaire" as a place to document the process of pre-assessment and pre-optimisation was discussed during the Clinical Governance Meeting.

Specialty	Audit name / title	Key actions following the audit
Audiology	Audit of the efficacy of Audiology telephone reviews	At the assessment and fitting stage we may need to put more emphasis on our acclimatisation counselling and ear mould selection. We need to ensure we are being transparent about what times we are available to perform the phone reviews. An alternative of a paper review could be tried. We would then need to audit this against phone reviews. If patients are reporting problems on the phone we could consider always booking them in for an appointment rather than suggesting they attend the drop in clinic. Various ways of documenting phone reviews on Auditbase made data collection more difficult. We need to ensure we are all using the same method of documentation, e.g. using the phone review column and perhaps having its own symbol.
	ENT referral audit	re-audit in 2 years
	All surgery performed on the Midlands Hearing Implant Programme 2014-15	Continue to increase the number of patients implanted each year. Continue to offer the Cochlear system as our preferred supplier. Ensure all surgeons continue to implant enough cases per year to maintain surgical competence.
	All referrals to the Midlands Hearing Implant Programme 2014-15	Continue to encourage referrals. Provide in-house training to regional audiology departments on update on hearing implants and referral criteria Business case to employ more staff
Burns	Effects of burns on autoimmunity onset: a single-centre experience	Cohorts of patients will need to be extended to include a larger case load (patients to be included from national database and within a greater time interval)
Cardiac Surgery	Daily review of outlier patients by cardiothoracic team	Daily review with adequate documentation of management plan Daily outlier update on handover sheet Re-audit in a few months and ? include registrar on call data to ensure performance of all registrars are taken into account
Cardiology	Re audit of radiation doses for coronary angiography and PCI	Further dose reductions are possible by reducing the acquisitions and using more screening and saving. Reduce the number of acquisitions in simple coronary angiogram wherever possible Dose can also be reduced by staging the procedure in complex PCI.
	Costing of the Genetic Testing Pathway for HCM	Continue with post change genetic testing referral pathway
	Use of Biofreedom stents	clear instructions for duration of DAPT on PICS discharge and clinic letter 2-Arrange a follow-up at the end of intended duration of treatment
	Sacubitril valsartan for treating symptomatic chronic heart failure with reduced ejection fraction	Initiation of an "Entresto clinic". Re-audit in 6 months.
	Acute Heart Failure Inpatient Service	more appropriate use of the HD9Q clinic appointments. Consultants to have post discharge clinic slots saved in all clinics for post discharge patients. re audit in 12-18 months
	An audit comparing TOE findings with surgical findings in mitral valve disease	To re-audit in one year To compare the accuracy of surgical findings with 2D TOE vs 3D TOE results

Specialty	Audit name / title	Key actions following the audit
Clinical Haematology	Drug Administration Audit	Feedback areas requiring improvement: reminding staff of the Trust standard and personal accountability and responsibility, relating to the safe administration of medications, to include: <ul style="list-style-type: none"> <li>• The patient's ID band must be on the patient</li> <li>• All ID checks to be performed</li> <li>• Hand decontamination</li> <li>• Ask patient if they have any allergies and ensuring if applicable, a red band is in place</li> <li>• Observe patients taking their medication</li> <li>• Checking of expiry dates</li> </ul>
	Transfer due in critical care: comparison with ICNARC standards	Include critical care delayed discharges and unplanned ITU admissions in weekly speciality meeting.
Critical Care	Adherence of Critical Care Unit to the UHB ICU bowel guideline	Increase awareness of guideline Presentation at audit meeting Guidelines to be posted on visible places e.g. Staff toilet doors Re-audit to assess any improvement and maintain good practice
	Atrial Fibrillation In Cardiothoracic critically ill Patients: The QEHB Experience	Patients with mild/moderate hypoxemia have a statistically significant chance of developing AF after cardiac surgery and they are more likely to require a prolonged inpatient stay. Due to the impact of postoperative AF on patient morbidity and health care costs, it is paramount that clear, up to date and evidence-based guidelines and protocols are in place to effectively optimize cardiac surgical patients in order to prevent postoperative AF. It would therefore stand to reason that AF is targeted in the existing enhanced recovery programmes as an individual intervention that could potentially affect clinically important outcomes in cardiac surgical setting. There is a need for adequately powered prospective studies examining the effect of different oxygen thresholds on postoperative arrhythmias, in all types of cardiac surgery and generating data on oxygenation targets.
	Extubation Practice in Cardiac ICU	Re-audit at a different period of the year. Include Date of admission, and Date of discharge in the Audit form Include any readmission after discharge.
	Correct Prescription of Stress Ulcer Prophylaxis in Intubated Patients	Electronic alert on PICS to prompt SUP prescription after 48hours of MV. After discussion at the audit presentation it was decided that a PICS alert was not needed but if an online daily ITU review chart is created for SUP to be something flagged up on there. Distribution of information – trust guidelines on distinguishing low, medium, high risk patients. After discussion at the audit presentation it was decided to await the ASHP guidelines in spring 2017 before a trust guideline is created. Further audit aimed at association of VAE and choice of SUP specifically Re-audit Await updated AHSP guidelines
	Audit of Apremilast treatment pathway in moderate to severe plaque psoriasis and 16 week outcomes	A check list has been designed and approved in departmental meeting in order to improve the documentation.
Dermatology	Audit of monitoring of lipid profiles in patients being prescribed Isotretinoin for acne vulgaris	To uphold high standard in lipid monitoring and re-audit next year. To implement a follow up protocol for abnormal lipid profile. To construct a system which can verify if consultant has viewed blood results on PICS.
	Psoriasis Audit on Patients at UHB against National Standards.	Assessment (audit standards 1-5) PICS/electronic data prompts for patients with psoriasis e.g. PASI, DLQI, PEST and psoriasis coding (should be mandatory to fill out before consultation completion) (audit standards 1-4) Send out DLQI and PEST questionnaires with instruction letter for patients to fill at home 1 day prior to consultation Encourage patients with smart phone to download Psoriasis 360 app and use DLQI calculator Encourage patients to increase awareness/education via Psoriasis Association

Specialty	Audit name / title	Key actions following the audit
Dermatology	Accuracy and completeness of surgical booking forms in dermatology	Measurement of size of lesion - reminder that tape measures are in every room Target dates – the team felt that this should not be changed as it gives them the choice to override set targets if capacity allows this Coordinates – The team wants to keep them as, even if infrequently used, they can be useful in patients with multiple lesions Next audit: Look into the patients without chosen pathology requests – how many would have needed specific tests which need to be indicated separately? Re-audit – 1 year
	The Appropriate use of direct IMF in the investigation of inflammatory skin disease	Log of samples when received by the lab/when processed for DIF Log of DIF requests kept by dermatology team for discussion at fortnightly dermpath MDT
	Audit of disease free and overall survival of Stage 3 melanoma	Skin MDT discussion about indications
	Audit of the management of Immunobullous disorders	Better documentation of baseline investigations, diabetic and hypertensive history in clinic notes. Use of DLQI in this group of patients Decision made that a proforma was not required but that HbA1c, weight/bp/BMI on all patients along with documentation of bone and GI protection of those on steroids, lack of DM and osteoporosis at clinicians discretion.
	Audit of completeness and accuracy of skin surgery booking forms	All pigmented lesions should be photographed prior the biopsy Ensure the correct side, site and size is documented. Wrong side surgery is a never event. This has been raised with the person completing that form by the Consultant in charge. Document the correct biopsy required, as well as the size and what it needs to be sent for. Select the correct operating list to avoid delay in booking. Punch biopsies on digits, genitals and hair cannot be performed by nurses. Indicate the right number of slots. Two punch biopsies are one slot. Complete the entire mandatory list accurately. Especially, clarify with patient anticoagulant use, allergies, heart conditions. Ensure patient has capacity to consent. If not, complete consent form C prior surgery, if possible. Indicate follow up arrangements clearly, so patient knows when to expect the results.
Diabetic Medicine	Audit of Retinal Grading in Diabetic Pregnancy	Closer links with Retinal Screening service to ensure women who do not attend retinal grading appointments are offered appropriate advice and appointments.
Ear Nose and Throat	QEHB Flexible Nasendoscopy Audit 2018	Be beneficial to have some 'emergency' scopes in a spare room. An alternative solution could be for the decontamination team to educate the ENT team in cleaning the nasendoscopes for when there are no uncontaminated scopes. In addition, it may be useful to have a spare light source available should this become faulty. Educating doctors on indications and methods for scoping would also be useful, although this has already been addressed in the ENT courses. Finally, it would be useful to repeat this audit in a month's time for when these changes have been implemented to determine whether we have sufficient FNEs, and to observe for any reduction in difference between indicated and completed scopes.
	Percentage of Patients requiring skin revision surgery within one year of original surgery	Although the program is now experiencing far less fixture failures it would still recommend ongoing monitoring. The audit needs to be repeated in 12 months to check that the failure rate has improved.
	Percentage of Patient group losing a fixture in the last 5 years.	Although the program is now experiencing far less fixture failures it would still recommend ongoing monitoring. The audit needs to be repeated in 12 months to check that the failure rate has improved.
	Audit of Streamer use in BCHI patients	A further study is planned to try and better meet the needs of minority ethnic groups.

Specialty	Audit name / title	Key actions following the audit
Ear Nose and Throat	Percentage of new BCHI patients requiring a skin reduction within 12 months of surgery.	We have recently changed to the Oticon Wide Fixture and surgical techniques are changing. Audit to be repeated to see if these changes affect the outcomes.
Emergency Medicine	ED management of neck of femur fracture patients including pain management	Promote pain score as a vital sign as there is a place for pain score on the observations chart. This will prompt repeat pain scoring and therefore more analgesia. Use of a designed "Suspected Neck of Femur Fracture Pathway" which can be used in addition to the current T&O Neck of Femur fracture proforma
	Pain in Children RCEM audit	Improve recording of pain scores – nursing education sessions Improve prescribing of analgesia – doctor lectures/ education sessions Update PICS prescribing portal for mandatory weight and pain score Re-audit to be completed by January 2019
	Audit of Anaphylaxis Management in ED	Update the UHB Clinical Guidance to bring it in line with Nov 2016 NICE Guidance. Create a web-based referral form for referrals to the UHB Immunologist
	Emergency management of shoulder dislocation	dislocated shoulder proforma To be started in triage – would prompt pain assessment and analgesia And continued by the assessing clinician Would encompass analgesia, x-rays, reviews, pain scores, sedations, follow up plans. Auditable
Endocrinology	Gynaecomastia Management QIP	In the majority of patients referred to endocrinology for management of gynaecomastia a hormonal cause was not identified. Screening for these conditions in primary care at the time of referral may help utilise resources more effectively. Patients with underlying endocrine conditions may see symptomatic improvements with effective treatment may be seen in those with endocrine conditions. With unavailability of surgery there remains a large unmet need for effective treatment options for resistant cases
	Peri-operative outcomes of patients with acromegaly at the QEHB	Establish a more systematic approach for visual assessment of the patients.
	Hypophysitis at QEHB	There is a need for an appropriate clinical code associated with the diagnosis of hypophysitis to aid clinicians in research and audit of this condition There is a need to establish criteria to aid diagnosis in this group of patient
	Management of patients with microprolactinoma in the Endocrinology Department at the QEHB Birmingham	aim to reduce the number of patients lost to follow up/with prolonged follow up times, particularly at the initial stages of dopamine agonist treatment when normal PRL has not been achieved. Establish protocols for dopamine agonist dose titration for timely achievement of normal PRL and for follow-up Ensure all newly diagnosed microprolactinoma patients have their IGF-1 measured. Ensure echos are arranged as per guidelines.
	Management and Outcome of Recurrent Non-functioning Pituitary Adenomas	Patients with regrown non-functioning pituitary adenoma require long-term monitoring even after therapeutic intervention. Patients who are simply monitored after the detection of 1st regrowth need to have close imaging surveillance as this group has the highest risk of further adenoma progression. The outcomes of this group of patients will be reviewed in 5 years (after the implementation of the close monitoring approach).
Endoscopy	Audit of Privacy/Dignity Standards in Endoscopy	Feedback to the Senior Sister and Matron, who will feedback to endoscopy team Review audit tool and plan date for re-audit
Gastro-enterology	Home Parenteral Nutrition in Palliative Care Patients	Further research into realistic prognostic indicators is warranted particularly in patients with a younger age at diagnosis. The NST at UHB will continue to follow current national guidelines.
	Assessment of colonoscopy referral appropriateness from GI & colorectal surgery clinics	Convert colonoscopy referrals from paper format to e-format so that each referral has to be justified according to the pre-set conditions. If not, clinical background has to be given for each unique case.

Specialty	Audit name / title	Key actions following the audit
Gastro- enterology	Home Parental Nutrition Patients - Satisfaction Survey	Coffee mornings have been held twice in the past but with poor attendance. Aim to plan a further coffee morning but to offer this on a different day of the week. Conduct a further satisfaction questionnaire annually
General Surgery	GlobalSurg-2 Study - Determining the worldwide epidemiology of surgical site infections after	We plan to be involved in RCTs that aim to reduce the incidence of SSI (SUNRISE / ROSSINI II).
Hands	Audit of 583 EPP Hands Service RN Coordinators to Prepare Operation/ Procedure Theatre Lists	Review and update protocol Disseminate Ensure it is noted that indication not audited, is audited and reviewed at next document review.
	Post falls compliance and influencing factors for patient falls on Ward 412	Regular prompts and email reminders with regards to falls education, falls risks, and what to do post fall - 3 monthly. Ward documentation link nurse to engage with staff to provide extra education regarding the new nursing documentation and what to complete post patient fall - Complete all staff by end of February. Potential future paperwork completion compliance audit to see if this is being completed. The falls educational posters kept at each nursing station to act as a visual prompt and guide and updated regularly as clinical guidelines and trust documentation are changed Continue with the trust provided falls training, but also include in-house training. Falls link nurse should continue to send out emails and do in-house or ad-hoc training regarding falls management. Obtain feedback from staff to see this training is useful.
	Nerve Gap Documentation Audit	Present findings to Hands and Plastics teams Formalise guidelines for recording of nerve gap repair Integrate guidelines into EHANDS noting Poster for theatres with guidelines
	The Birmingham Wrist Instability Programme	The findings support the need for further research to evaluate the rehabilitation programme in a larger group of patients over the longer term.
	Evaluating patient and doctor experience of the New Trauma and Hot Hands Clinics	Re-Audit required to see if things are different as Audit took place after new clinic had just started. More facilities to see patients More control over bookings Delayed start/"buffer" time between clinics
	Return to theatre service evaluation	Clearer operation notes: Consultant present / not present / consulted A mechanism to identify cases that did not require further surgery Can infected cases be managed on an outpatient basis? Once daily IV antibiotics Day case surgery via ambulatory care Consultant led daily follow up e.g. CY1Q for infections...? Clinical photos on portal / patients phones?
	Clinic Capacity for New Hand Trauma	System errors to be ironed out Leaves to be staggered Consider weekend clinics by the on-call team (similar to Trauma & Orthopaedics)
	Flexor tendon rehabilitation	Start to use therapy educational video to augment verbal advice from therapist and re audit.
	Glomus Tumours: A 5 year institutional experience	Expand review for past 10 years Disseminate results to Trauma and Plastics departments Perhaps the introduction of a proforma will allow early treatment Review in 12 months' time.
	CoNECT study recruitment audit	Continue monitoring recruitment and screening rates. Support junior staff in the screening process
Hepatobiliary & Pancreatic Surgery	Outcomes following hepatic resection in patients on statins peri-operatively	To continue use of statins pre-operatively as per unit policy



Specialty	Audit name / title	Key actions following the audit
HIV	Are women being offered appropriate contraception while on HAART?	The findings highlight the need for on-going healthcare professional training to ensure women living with HIV are offered appropriate contraceptive choices and robust checks are in place to ensure correct provision. Training to include increasing condom use to reduce HIV transmission, incidence of sexually transmitted infections and to provide optimal contraception in conjunction with other contraception methods
Imaging	Adherence to the EPP for X-ray guided wire localisation of mammographically identified abnormality	Update 482 Expanded Practice Protocol for X-ray guided wire localisation of mammographically identified abnormality as detailed above Familiarise all staff with the new protocol
	Audit of the use of Conscious Sedation in the Interventional Radiology Department	IR medical and nursing leads to investigate the possibility of being able to assess the patients prior to their arrival in the department. Repeat the audit in September 2018. The Practice Development Nurse and IR staff to review the audit tool in preparation for the next audit.
	3D vs 2D feature tracking	Replacement of 2D FT-CMR with 3D FT-CMR for the measurement of myocardial deformation on cardiac MRI studies at University Hospital Birmingham Cardiac MRI department. Provision of reference ranges for 3D FT-CMR
	Audit of EPP for Radiographers to undertake & report imaging exams. Large bowel.	Amend the protocol to remove double contrast barium enema examinations Radiographers to continue to regularly review practice EPP to be reviewed and audited in 3 years' time ( December 2017)
Integrated Sexual Health	Partner Notification Informatics Audit	PN patient information leaflet Staff training New PN database
	Emergency contraception (EC) provision in umbrella clinics	Results of the audit would be made available to all staff who did not attend the meeting but do see patients requesting emergency contraception. In addition all staff would be reminded of the need to fully document eligibility for emergency IUD and whether this was offered in addition to discussions regarding future contraception and offers of STI screening. Once this information has been passed onto staff a new audit will be conducted at a future date to see if we have made any improvements and are closer to reaching the faculty's auditable outcome rates of 97%
	WM BASHH 2017 Audit HIV testing and documentation of reasons for non-testing	Improve HIV testing uptake Documents in notes clearly the reasons for not testing Variability of POCT across the region Offer POCT to all patients who declined bloods for HIV Document discussion of window period in applicable patients Encourage system to recall for window period testing
	Evaluation of management of women presenting with symptoms of PID by doctors	New local guidelines for management of women with lower abdominal pain (added to PID) Further training on differential diagnoses & management of women presenting with lower abdominal pain E.g. Endometriosis, urinary tract, chronic pelvic pain Looking at guidance for letters to GP e.g. PID & women with lower abdominal pain
	Adherence to local and national protocols for management of women with Female Genital Mutilation	continue FGM within Mandatory training continue FGM updates within Umbrella training all clinical staff to complete Health Education England FGM e-learning module (Umbrella Training team to liaise) re-audit total figures for 2018, from Jan 2019
	Factors associated with the return of STI testing kits	The report was published in BMJ Open. We have been monitoring the return of STI testing kits for certain populations more rigorously. We have introduced some improvements for sample collections.
	PEPSE provision across Umbrella services	Nil from this project as the PEPSE guideline is changing. This will need to be audited in own right and actions will stem from this.

Specialty	Audit name / title	Key actions following the audit
Integrated Sexual Health	Clinic outcomes for female patients reporting contact or diagnosed with gonorrhoea at WSC	<p>data was presented at Consultant policy meeting 7.11.17( alongside the male data).</p> <p>The decision to stop automatic treatment of GC contacts was made. There will be caveats to this, clinical judgement is required. Overall this approach will avoid over treating significantly more than whom require recall for treatment. we have demonstrated that the time delay in this ( for most) is short, ability to re-attend is one of those factors to consider when considering epidemiological treatment.</p> <p>The information was also disseminated at the Clinical Staff meeting on 28.11.17 to doctors and Senior nurses</p> <p>Audit to indicate actual practice once changes have been made ( approx. 1 year's time) will be planned</p>
	Management of problematic bleeding while on hormonal contraception	<p>Highlight this issue to the Umbrella Training team so that it can be included in training package for staff to include -</p> <p>Encourage and explain to young patients importance of screening (discrepancy between offered and performed screens)</p> <p>To standardise the assessment and management of problematic bleeding throughout the Umbrella team so that staff consider both infections and contraception as potential causes regardless of their training background (GUM or contraception)</p>
	Women who had a pelvic assessment before insertion of IUCD	<p>It is mandatory to carry out a pelvic assessment before insertion of an intrauterine contraceptive device.</p> <p>Accurate documentation of findings following pelvic assessment</p> <p>Clinicians were informed of their individual scores</p>
	Performance of male urethral microscopy for the diagnosis of gonorrhoea in the era of the NAAT	<p>Information dissemination</p> <p>To discuss treatment of GC contacts in the Consultant's policy meeting</p>
	BASHH National Clinical Audit 2017: Management of Syphilis	<p>following discussion at the clinical meeting it was felt that improvements could be made in both the HIV/STS retesting standard and the PN standard.</p> <p>policies were agreed at the meeting and an email documenting changes was distributed to all SH staff</p>
	Audit of Emergency hormonal Contraception provision within Umbrella Pharmacies	<p>Audit findings shared with Local Pharmacy Committee</p> <p>Pharmoutcomes (electronic record) has been altered to make it clearer &amp; to make compulsory sections (reason for not requiring emergency coil must be completed)</p> <p>Pharmacy working Group has been implemented looking at simplifying initiation of STI testing kits via pharmacy</p> <p>Pharmacy training has been adapted to emphasise importance of emergency coil &amp; referral/book appointments</p> <p>Emergency coil slots have been made available across Umbrella on a daily basis (so should be easier for pharmacists to ring up and book).</p>
	Management of Gonorrhoea in satellite clinics	<p>Cultures should be taken from ALL EXPOSED SITES prior to treatment when results are not available a time of treatment.</p> <p>QCFU should be booked for all patients treated for GC</p> <p>At QCFU staff should check TOC appointment is booked and remind patients to attend TOC</p> <p>Culture positivity rate low compared to NAATs(particularly from urethra)</p>
	A service evaluation comparing home-based testing to clinic-based testing	<p>Further analysis to look at reasons for low return rates. Umbrella self-sampling kit group</p> <p>Need to promote home-testing amongst ethnic minorities/Transgender patients.</p> <p>Review home-testing kits and whether patients need to input confidential data including name, DOB, postcode on the kit forms.</p>

Specialty	Audit name / title	Key actions following the audit
Integrated Sexual Health	Audit of the Management of Young People reporting Substance Misuse within Umbrella.	<p>We have presented these findings at our departmental quality improvement meeting.</p> <p>We are planning a training module to educate all staff members on appropriate use of existing referral pathways and advertise the services already available. Leaflets must be available in all clinic rooms and supply checked regularly.</p> <p>The results of this audit have helped inform the lead for Young Person's services at Umbrella. There has been liaison with Aquarius and improve access to support clinics within our young person's service.</p> <p>We plan to re-audit 4 months after these interventions.</p> <p>We plan to extend the audit to address the following objectives in the re-audit:</p> <ul style="list-style-type: none"> <li>• To evaluate the extent to which young people presenting to Umbrella Sexual Health Services self refer to Aquarius Substance Misuse Support services.</li> <li>• To evaluate the uptake of Aquarius support services by young people within Umbrella Sexual Health Service</li> </ul>
	Audit of Hepatitis C screening in risk groups attending the sexual health clinic	<p>Clinicians should be made aware and reminded of the recommendations with regards to HCV screening and management. Additionally, the importance of documentation should be underscored to improve accuracy of further audits.</p> <p>The guidance should be modified to incorporate the management of equivocal results, and clinicians should be made of aware these changes.</p> <p>Lastly, patients should be educated on the HCV, particularly as due to modern advancements in treatment, this is now a mostly curable disease. The importance of follow-up appointments and treatment should also be made abundantly clear.</p>
	Management of women presenting with symptoms of PID by Nurses	<p>improvement in record keeping wrt bowel &amp; urinary symptoms</p> <p>Increase pregnancy testing</p> <p>Examination to be undertaken even if chronic problem.</p> <p>Improve confidence of nurses undertaking bimanual examination and history on women presenting with lower abdominal pain by circulating results presented at staff clinical meeting</p> <p>Disseminated by email and via clinical teams via Band 7 nurses</p> <p>Add specific recommendations to local PID guidance</p>
	Partner Notification in cases of chlamydia infection	<p>All presented as staff meeting as evidenced by attached (email below)</p> <p>Staff to book QCFU at 2 weeks</p> <p>Continue to encourage PN; discuss resistance, transmission and importance of re-testing.</p> <p>Address PN as soon as possible before the 4 week threshold. Complete the relevant Excelicare page for PN</p> <p>Need more Health Advisers to complete PN outcomes within 4 weeks - in future when staffing levels increase Health Advisers and Nurses to see patients for PN and better training for better outcomes</p>
	Management of survivors of sexual violence	<p>Further work is needed to improve clinic accessibility, including the introduction of on-line booking. A project, using qualitative methodology, has been funded to evaluate patient experience and promote quality improvement</p>
	The investigation and management of Erectile Dysfunction within the Umbrella Sexual Health Service	<p>To improve asking about recreational drug and alcohol use and re-check medications and document</p> <p>To send GP letter at first attendance to GP</p> <p>To measure BP and BMI in clinic</p> <p>To consider clinical examination</p> <p>will consider all referrals coming via GP to ensure investigations are taking place if no improvement</p>
	Documentation of Client Consent for communication and confidentiality for psychosexual therapy	<p>continue good practice</p> <p>audit findings were communicated to Dr K Jaffer whose case notes were audited.</p>
Major Trauma Centre	Audit of rib fractures treated with open reduction and internal fixation	In patients with multiple rib fractures (especially flail segments) and in context with multiple concomitant injuries, consideration should be given to early rib fixation.

Specialty	Audit name / title	Key actions following the audit
<b>Major Trauma Centre</b>	Non-battle trauma in UK military personnel since the end of combat operations	Although service personnel sustain civilian- type injuries, the specific rehabilitation goals and shift in the acute rehabilitation requirements for military personnel must be considered in the absence of enduring combat operations. It is notable that permanent medical downgrading secondary to trauma still occurs outside of warfare. The colocation of civilian major trauma services and R4 has ensured a mutually beneficial partnership that contributes to institutional memory and improves the coordination of patient pathways. The importance of relevant resource allocation, training, support and logistical considerations remain, even during the current scale of military activity overseas.
<b>Maxillo-Facial Surgery</b>	Condyle height and angulation	Further research required to establish clearly when the condyle should be opened
	Complications following surgery for mandible fractures	Plan to re-audit results and compare to those as a registrar Use this for consultant revalidation
	Clinical outcome of intralesional bleomycin for vascular anomalies	Further audit & analysis would benefit from standardised outcome measures/ tools - the OVAMA project due to be launched by ISSVA later this year will be helpful in this regard
<b>Microbiology</b>	Native Vertebral Osteomyelitis	An extended re-audit is in order. All NVO in a three year period should be audited. 2017-2018 cases should be audited.
<b>Neurology</b>	Door to needle" time for the treatment of acute stroke with intravenous thrombolysis	Extend working hours of stroke nurse practitioner. Reduce A+E assessment to CT scan time by requesting a CT scan after history (rather than after both history and examination). Reduce stroke assessment to thrombolysis prescription time by having a second person involved in patient assessment e.g. doctor one concentrates on stroke diagnosis whilst doctor two/nurse practitioner concentrates on the thrombolysis safety checklist. Draw up thrombolysis medication (alteplase) ready for use before the results of the CT scan are known (rather than after receiving CT result)
<b>Neurosurgery</b>	Clinical outcomes of VNS therapy with AspireSR at a large Complex Epilepsy and Surgery Centre	We recommend modifying the information conveyed to patients during counselling sessions from the traditional rule of thirds where a third of patients had significant benefit (>50%), a third of had less significant benefit (<50%) and the final third had no benefit. Now, one- third of implanted patients will have very significant benefit( =80%) seizure burden reduction, one- third of patients will have significant benefit(50 – 79%) and the final third will have less significant benefit (<50%).
	Outcome of Brain Metastases excision with post op radiotherapy(WBRT/SRS) Vs no post op radiotherapy	Results are in accordance with current evidence that suggests that post-operative radiotherapy may improve progression free survival, but not overall survival. However given the toxicity associated with radiotherapy, we recommend an individualized approach to patients who had surgery for brain metastases
	Pituitary screening in TBI patients	Clinicians should continue to screening for PD in all TBI patients until a sound method of stratifying patients into a high-risk group has been proven. Screening should occur on more than one occasion as PD onset can be delayed. Future research should focus on other methods of identifying those at risk of pituitary dysfunction following head injury
<b>Oncology</b>	Audit of 551 EPP for Registered Haematology Research Nurses to undertake punch Skin biopsies	To review and update protocol
	Audit of 554 EPP Haematology Nurse Specialist Led Clinic Management of Pts with MPD	Review and update protocol Disseminate
<b>Ophthalmology</b>	OCT patient throughput for the Medical Retina service	Decrease QHU slots to meet required capacity Increase staffing for Med Ret when required

Specialty	Audit name / title	Key actions following the audit
Ophthalmology	Documentation in notes and consenting for patients treated with Retinal laser	To educate junior doctors to better document this critical data in the patient records.
	Panretinal photocoagulation for treatment of proliferative diabetic retinopathy	Clinicians to emphasise at listing whether new PDR and that PRP should be initiated within 2 weeks. PRP to be done on the day - especially when there is clinical capacity (i.e. allocate one doctor to perform lasers). Patients can be brought back at the start of a morning clinic to have laser done
Physiotherapy	review of EPP for Review & Treatment, by a Physio, of Pts undergoing Limb Reconstruction	Develop PGDs for supply of antibiotics develop competencies for suture removal and dressings proceed to protocol sign off
Plastic Surgery	In House Training	Structured teaching curriculum for 2018 Bigger Rooms Booked till Feb 2018 Avoid clashes with BBA, BAPRAS, BSSH Integrate Regional teaching
	Snapshot audit of Flexor Tendon repair documentation in 2016	Raise awareness by presenting this to the hand department and facilitate discussion Standardising the actual documentation To discuss with one of the senior consultants regarding forming a proforma to aid in the data capture of the tings missed using the electronic e-hand system
	Options of local tissue cover in open fractures of the lower limb	Look at the outcomes of local flaps performed for open tibial fractures
	Audit of sternal wound reconstruction	Complex patient ( multiple comorbidities, complex wound, advanced cardiac procedures) MDT approach with Cardiothoracic team, Microbiology and Plastic Surgery Debridement until clean wound bed
	Relationship between outcome of flexor tendon repair and extension deficit at PIPJ	Satisfactory number of days between injury and repair: aim to maintain this number Encourage more compliance with follow up Monitor MCPJ for extension deficit after flexor tendon repair
Pre-Admission Screening	Pre-admission documentation of regular medication	Focus on one agreed standard for documentation to prevent fragmentation Altered pre-op letter received by patients - discussed last year but not implemented Education sessions with pre-admission nurses, focussing on areas of poor documentation from the 2015 audit
Pre-Assessment	Audit of the RAID Referral System at Queen Elizabeth Hospital Birmingham	Implement education for medical staff centred around the psychiatric assessment through teachings or online modules Split up the Physical Condition and Medical Management Plan section into two sections to highlight dual importance Clearly list the items contained within a standard MSE on the referral form itself Increase the size of the Risk Details text field on the referral form to highlight its importance and include important aspects of the risk assessment as supportive text To make the Additional Information section more useful, add a small shortlist of items at the bottom of the referral form that could be mentioned such as social history, behaviour charting, date of hospital admission, current psychiatric medication or whether or not sedation has been administered Contact the PICS Team to enact the above recommendations to the RAID referral form following presentation of audit results to the RAID MDT Re-audit in 6 months once recommendations are implemented to the RAID referral form to ensure that the changes were meaningful and produced referrals of higher quality
Respiratory Medicine	Dependence Score audit	A re-audit in conjunction with a review of quality indicators is recommended to identify if the current ward establishment is having a negative impact on patients' care.
Rheumatology	Impact of early arthritis clinic on cohort recruitment	Maintain the EAC in the IRF unit

Specialty	Audit name / title	Key actions following the audit
Rheumatology	Adrenal insufficiency secondary to corticosteroid use	<p>Ensure clinicians/nurses are aware that a borderline cortisol level needs to be followed up by a repeat - not a SST and not to be deemed as normal.</p> <p>Ensure clinicians/nurses are aware that investigating for adrenal insufficiency secondary to corticosteroid use should only be undertaken on patients on 5mg or less of prednisolone (or equivalent) with an intention to stopping steroids in the future.</p> <p>Ensure clinicians/nurses are aware that these guidelines are only applicable if a cortisol is taken between 8-10am. Encourage to have cortisol tested during these times.</p> <p>Ensure clinicians/nurses are aware that PICS is the best way to refer patients for SST - auditable, quicker, less resources, preferred by endocrinology team.</p>
Therapies	Physiotherapy shoulder Hot Clinic Audit	<p>Feedback results to ambulatory care nursing managers</p> <p>Further teaching to ambulatory care nurses about sling advice</p> <p>Review information leaflets as appropriate</p> <p>Review staffing to ensure appropriate number of appointment slots within the clinic</p>
Trauma and Orthopaedics	Audit of Drug Missed Doses on Ward 412	Feedback to the Senior Sister and Matron, for them to ensure all staff aware of processes for ordering medications, how to pause medications and the need to review/offer PRN medications.
	HIV/BBV screening audit in orthopaedic trauma patients	<p>Patients with MSK infections should have BBV screening as part of routine blood tests – this should be documented in the notes aiming for 100% compliance, documenting OPT OUT if appropriate.</p> <p>Awareness will be aided by posters in ED, assessment units and fracture clinic.</p> <p>Increase doctors' awareness (doctors induction).</p> <p>Re-audit in 3-6 months.</p>
	Re-audit on limb elevation for inpatients with ankle fracture	<p>The audit identified that documentation rates had fallen compared to initial audit. This can be improved by educating the Doctors about the importance of documentation and introducing this in their induction.</p> <p>In some cases, despite documentation in the notes, not all patients had their legs elevated on the wards. The importance of better communication between all healthcare professionals is therefore vital.</p> <p>Patients also need to be educated and informed about the morbidity of swelling and the importance of keeping limb elevated as much as possible.</p> <p>The final aspect is the different devices used for elevating the limbs. Having orthopaedic elevation wedges on the T&amp;O wards will ensure uniformity in devices used for elevating the limb.</p> <p>Re-audit in a year's time to account for any improvements in our practice.</p>
	Geographical distribution of patients attending the fracture clinic at QE Hospital in 3 months	<p>Whether the Department manages safely and responsibly the workload given that in Clinic we see patients coming from areas who have other Hospitals.</p> <p>Whether the Trust gets any compensation or if financial regulations are in place, regarding the patients belonging to other CCGs.</p>
	Antibiotic prescription for open fractures	<p>Display the antibiotic policy in bigger fonts in theatres, A&amp;E and include in junior doctors induction book</p> <p>Re-audit over longer period (3 to 6 months)</p>
	Patient- Led Rehabilitation After Anterior Shoulder Stabilisation, Is It Safe?	Carry on with current protocol for rehabilitation after stabilisation as the results are comparable to the old protocol
	Re-audit of compliance of fracture clinic referrals regarding the BOAST guidelines	Develop local fracture clinic referral guidelines and follow them prospectively
	Incidence of meniscal injuries due to delayed ACL reconstruction surgery on unstable knee	In order to save the knee of these patient waiting time should be within 18 weeks since the first presentation of patient till they have their surgery
	Does local administration of lidocaine at pin sites improve pain during frame removal in clinic?	<p>All patients should be offered LA infiltration at half pin and olive wire exit sites prior to frame removal in clinic.</p> <p>Results disseminated to all members of the Limb Reconstruction Team</p>

Specialty	Audit name / title	Key actions following the audit
Trauma and Orthopaedics	Referral pathway for Ankle sprains in the last one year	This study demonstrates the sensitivity in dynamic ultrasound scan in evaluation of lateral ligament complex injuries which may enable minimisation of MRI usage resulting in more convenient patient experience and financial savings. The proposed pathway ensures that all persistent ankle injury patients have a clear pathway of management having failed conservative methods. The surgical strategy had demonstrated good outcomes in this small group clinically though not statistically significant. Moving forward, implementation of this study would involved a prospective study in which AOFAS scores are collected at the points marked by red stars to determine the epidemiology of the injury and subsequent outcomes, whilst also allowing for a full cost-benefit study.
	Antibiotic prescription for open fractures	All aspects of antibiotic prophylaxis where prophylaxis is not given when recommended should be recorded in operation notes, clinical records. General consensus required to reduce variation. Guidelines should be displayed in theatre. Guidelines to be clarified – example cases could be used. Guidelines are to be amended. PICS proposals are to be amended accordingly.
	A volar plate is not just a volar plate	Consider the construct Significant cost savings without necessarily affecting patient outcomes Use screws judiciously Recommend more thought prior to plate and screw choice
Trustwide/ Corporate	Antithrombotic stockings (AES) audit	Feedback to appropriate Lead Nurse, Divisional Preventing Harm leads, ward staff including ward managers and band 6 nurses
	customer care audit for ABP audit day	Maintain good practice Highlight areas for improvement Include on teaching sessions and mentoring sessions as areas for improvement Investigate reasons for queues on main corridor near area 4
	Audit of phlebotomy EPP	The protocol is to be updated as planned.
	Enhanced Care Audit	Feedback as appropriate and recirculate the Enhanced care key messages
	Calculated Globulin Audit	These results suggest that we are not investigating patients with an abnormal calculated globulin, either above the normal range or below the normal range. Suggested action is to initially present this information to the specialties whose patients seemed to make up the largest portion of these patients, e.g. haematology and liver. This plan should include steps to increase education and discuss strategies that can be undertaken to improve identification and investigation of an abnormal calculated globulin.
Urology	RADIOLOGY REPORTS OF MRI PROSTATE	Radiology reports of MRI prostate should have PIRADS V 2
Vascular Surgery	Audit of Vascular Day Cases in Ambulatory Care	To discuss further measures to continue improving the quality of discharge letters. This may involve keeping the posters up permanently. Our main intervention has been performed.