RESULTS: 31 handovers were audited. 45% of handovers had a delayed start, the most common reasons being an unprepared list or team members being late. Handover attendance was poor for nursing staff and consultants. Electronic handover was always used. Of the 283 patients on the lists, data recording was good for name, date of birth, admission date, ward, diagnosis, treatment plan and outstanding tasks. Recording was substandard for results, if review was required, clinical status and patient bed space.

CONCLUSIONS: The guidelines were being achieved in many key aspects of handover (thanks largely to the electronic handover system). However, areas requiring improvement include start time, nursing attendance and recording of patient bed and clinical status. We recommend that there is a handover start brief reminder and that nursing staff and consultants attend handover.

0489: THE USE OF GUIDELINES TO RATIONALISE BLOOD TESTS ON EMERGENCY SURGICAL PATIENTS
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Aim: Most emergency general surgical patients have blood tests performed on admission with no published evidence on the subject. This study aimed to identify blood tests frequently performed inappropriately and tests often missed, and to create and evaluate the potential impact of guidelines.

Methods: A representative group of general surgical emergency admissions over 3 months were randomly selected and retrospectively analysed. Data collected included presenting complaint, blood tests on admission, and presence of diabetes, jaundice, anticoagulation and haemodynamic instability. A novel guideline was applied and comparison made between predicted and actual blood tests performed.

Results: Total of 121 cases (67 female, 54 male, median age 65; range 17-101 years), 10/121 (8%) were outside the remit of the proposed guideline. Only 28/111 (25%) adhered to proposed guideline. CRP and amylase (68/107 and 88/107, actual vs predicted) were frequently missed, while an excess of coagulation screens and group and saves were performed (42/21 and 51/36, actual vs predicted). Strict adherence to the guideline would have resulted in a saving of £2.99 per patient.

Conclusion: Many unnecessary blood tests are performed while others are missed. The introduction of guidelines could lead to significant savings when applied to all patients.

0536: DAY SURGERY PERFORMANCE: USING SIMPLE, COST NEUTRAL MEASURES TO IMPROVE CLINICAL AND FINANCIAL PRODUCTIVITY

Productive Day Surgery units can help provide efficiencies needed to modernise the NHS in a challenging financial climate. This study set out to improve DS performance in an Acute Trust after audit results highlighted inefficiencies in 2008.

From 2008 - 2010, data was collected at a single DS unit. Booking efficiency (% of each list booked), theatre efficiency (% of theatre time used), patient attendances, cancellations and case volume were measured. A lead surgeon, anaesthetist, nurse and manager established a DS improvement Steering group. Novel scheduling and booking programmes were developed, and new managers recruited in a cost neutral framework. Efficient practise was cemented into the work culture through clinician engagement.

Booking efficiency improved from 59.9% to 79.9%, and theatre efficiency improved from 64.6% to 78.4%. Case volume increased by 17% over the first 6 months. DNA/cancellation rate fell from 21% to 5%. Global DS unit performance increased from of 145th out of 166 units in 2008 to 66th in 2010, and revenue generation rose by more than £281,000.

Improvement of DS performance can play a central role in delivering mandated DH efficiency savings. Multidisciplinary working engineered sizeable efficiency and financial gains in a cost neutral framework.

0555: CAN THE MODE OF ANAESTHESIA INFLUENCE THE READMISSION RATE FOLLOWING ELECTIVE HERNIA REPAIR?
Neena Randhawa, Rory Johnston, Timothy Rowlands. Royal Derby Hospital, Derby, UK

Aim: To assess if the mode of anaesthesia used for elective hernia repair influences readmission following successful discharge from day surgery.

Method: Retrospective case note review of 100 consecutive patients (June 2010 – December 2011) who underwent elective hernia repair performed by a single consultant.

Results: Average age was 55 years (19-79), with 89 males and 11 females. 46% of patients had right and 40% underwent left inguinal hernia repair. The remaining 14% were: 5% bilateral, 4% femoral, 4% umbilical and 1% epigastric hernia repair. Of 100 patients, 87% had general anaesthetic, 9% spinal and 4% local anaesthetic. Six patients were readmitted, all had the procedure under general anaesthetic; of these, four were for pain management, one for wound infection and one for scrotal haematoma. The patient with scrotal haematoma was admitted for 2 days but the rest were successfully discharged within 24 hours.

Conclusion: Inadequate analgesia post-operatively was the main factor for readmission in our study. Small sample size has provided limited information but with a recent change in the consultant’s practice to perform procedures under local/regional anaesthesia, further study would look to compare the factors for readmission.

0558: ARE MODIFIED EARLY WARNING SCORES RECORDED CORRECTLY IN SURGICAL PATIENTS?
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Background / Aims: Modified early warning scores (MEWS) have been developed early to correlate well with transfer to HDU/ITU, length of stay and inpatient mortality. We aimed to establish whether MEWS were being recorded and acted upon in accordance with Trust and NICE guidance.

Methods: Surgical in-patients (n=71) were audited over a 24 hour period for MEWS, including accuracy of calculation, frequency of recording, request for review and timing of review. The results guided re-education and implementation of changes. Subsequently, we re-audited (n=67).

Results: The percentage of patients with incorrectly calculated MEWS was 22% compared with 3% after re-education (p<0.0001). The percentage of missing MEWS was initially 38% compared with 14% after re-education (p<0.0001), with the majority of missing scores occurring between 11PM and 8AM (53%). In 60% patients a review was not asked for following MEWS triggering, compared with 14% following re-education (p<0.05). Of those MEWS that triggered, only 40% adhered to the correct timing of review (<30 minutes) compared with 71% on re-education.

Conclusions: Re-education and organisational changes improved MEWS, but the level of accuracy remained unsatisfactory. Further education and the use of hand-held digital devices may be required.

0643: ARE SERUM BILIRUBIN LEVELS USEFUL IN DISCRIMINATING BETWEEN PERFORATED AND NON PERFORATED APPENDICITIS?
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Aim: To assess serum bilirubin levels can be used to differentiate between perforated and non perforated appendicities

Method: A retrospective study of appendicectomies (n=188) performed in two different hospitals from March 2011 to September 2011 was performed. The cases were divided according to histology as normal, inflamed and perforated. Pre operative measurements of serum bilirubin, white cell count and CRP levels were compared between the three groups using a one way analysis of variance.

Results: No significant difference in the mean serum bilirubin levels between the inflamed and perforated groups was noted (p=0.1). Mean serum bilirubin levels were found to be significantly lower in the normal group when compared to the inflamed (p<0.02) and perforated groups (p<0.001). Mean CRP levels were significantly higher in the perforated group when compared to the normal (p<0.005) and inflamed (p<0.005) groups. White cell counts were also significantly higher (p<0.005) but there was no significant difference between the inflamed and perforated groups.

Conclusions: While hyperbilirubinaemia is suggestive of appendicitis in conjunction with the clinical presentation, it cannot be used to
0690: CONTINUOUS WOUND INFUSION AFTER MAJOR ABDOMINAL SURGERY - BETTER RECOVERY OUTCOMES VS EPIDURAL

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Aim: We aimed to examine differences in post-operative mobilization and hospital stay in patients undergoing major abdominal surgery managed with continuous ropivicaine infusion via wound catheters (WCs) compared with epidurals.

Method: Retrospective review of notes of patients undergoing major abdominal surgery between 2009-2011 was undertaken. Main outcomes measured were time until mobile (able to walk to toilet) and length of hospital stay. Other outcomes measured included time to removal of urinary catheter and return of bowel function.

Results: 76 patients received wound catheters and 19 patients received epidurals. Patient characteristics and surgical variables were comparable in the two groups. Median length of hospital stay was 6 days for WC patients, significantly shorter than 8 days for those given epidural anesthesia (P = 0.034). Median time to mobilisation was shorter in the WC group compared to the epidural group (2 days vs. 3 days, P = <0.01). Urinary catheters were removed earlier in the WC group compared to the epidural group (3.5 days vs. 5 days, P = 0.037). There was no difference in time to return of bowel function.

Conclusion: Continuous regional anesthesia via wound catheters is associated with earlier mobility and shorter hospital stay compared to epidural anesthesia.

0722: DISTRACTIONS, INTERFENCES AND IRRELEVANT COMMUNICATIONS (DIICS) IN THE UROLOGICAL MULTIDISCIPLINARY TEAM

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Introduction: Multidisciplinary teams (MDT) have widely been accepted as the model for urological cancer service delivery. Although research has shown DIICS reduce performance during urological surgery; their effect on MDT performance is unknown. We describe the content, initiators and recipients of DIICS, and consider their impact on urological MDT meeting efficiency.

Patients and Methods: A single observer collected data from 815 consecutive cases (520 local, 295 specialist) at 32 urological MDT meetings over a thirty-six week period, across three independent NHS Trusts. The nature of DIICS was determined through MDT behaviour, and task related activity. In addition, timing of the MDT meeting, individual cases and DIICS were recorded.

Results: Distractions initiated by MDT members accounted for 44% of all observed DIICS. The remaining were task-related (17%, mobile phone, etc.), the environment (18%, temperature, etc.), equipment (12%, teleconferencing, etc.) and coordination (9%, late-additions, absence, etc.). Technical difficulties accounted for 30% of distractions during video-linked discussions. DIICS resulted in individual MDT case discussions being prolonged by an average of 120 seconds, and each meeting by 21 minutes.

Conclusions: DIICS consume time, and their reduction could improve MDT meeting efficiency. This would allow for lengthier case discussions, increased case numbers, and shorter meetings.

0724: IS THE ASSESSMENT OF DECISION-MAKING, DISTRACTIONS AND COMMUNICATION IN MULTIDISCIPLINARY TEAM (MDT) MEETINGS FROM VIDEO RECORDINGS FEASIBLE AND RELIABLE?

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Objective: The quality of MDT working has a significant impact on patient care. We assess the feasibility and reliability of decision-making, distractions and communication in MDT meetings from video recordings using previously validated assessment tools.

Methods: 94 cases discussed at seven MDT meetings were video recorded and analysed by two blinded registrar level surgeons. Assessment was carried out using previously validated MDT tools for the assessment of decision-making, distractions and communication quality. Inter-rater reliability was assessed using an independent T-test and Intraclass Correlation Coefficient (ICC).

Results: Data was successfully captured for all 94 cases across 61 domains. Case discussions lasted an average of 228-seconds. Most distractions came from the environment and irrelevant communications. Information from case history, radiological and pathological investigations were frequently presented by surgeons, physicians and oncologists. There was no difference between the observers for the mean ratings of any domain, and overall correlations were good for the assessment of distractions and communication (ICC=0.957, P<0.001) and decision-making (ICC=0.904, P<0.001).

Discussion: The use of video recordings is a feasible and reliable method of assessing MDT working and acts as an assessment tool. The ability of teams to assess their own performance in MDT meetings enables promotion of good practice.

0725: WHAT IS THE NEGATIVE APPENDICECTOMY RATE IN WOMEN HAVING DIAGNOSTIC LAPAROSCOPY?

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Aims: Management of the macroscopically normal appendix at surgery remains controversial. Traditionally, during open surgery, there’s a negative appendicectomy rate of approximately 30% in women. However there’s increasing use of diagnostic laparoscopy. The aim of this study was to investigate current practice during diagnostic laparoscopy in young and middle-aged women to assess the negative appendicectomy rate.

Methods: From January 2010 - April 2011, details of women aged 16 - 60 years attending SAU with RIIF pain, were recorded on a prospectively collected database and analysed.

Results: 308 female patients were admitted with RIIF pain (median age 25, range 16-59 years). Of these, 80 had a laparoscopic procedure. 43/80 (54%) had macroscopically inflamed or congested appendices, all of which were removed. 35/43 (81%) were confirmed as appendicitis histologically. 2 had other appendiceal pathology, 6 were normal (14%). From the remaining patients who had macroscopically normal appendices (37/80), 12 had appendicectomy (32%), all of which were histologically normal.

Conclusions: The negative appendicectomy rate in macroscopically normal appendices was 14%, which rose to 33% (18/55) when taking into account normal-looking appendices as well. Despite the use laparoscopy as a diagnostic aid in women with RIIF pain, the negative appendicectomy rate has remained constant.

0736: A CLINICAL AUDIT OF ENHANCED RECOVERY AFTER SURGERY (ERAS) IN SIX SURGICAL SPECIALTIES AT NOTTINGHAM UNIVERSITY HOSPITALS - ONE YEAR REVIEW

Sarah Humphries, Nick Simson, James Catton, John Hammond, Chris Gornall, Charles Maxwell-Armstrong, University of Nottingham, Nottingham, UK

Aims: ERAS aims to improve elective surgical recovery and reduce post-operative length of stay (LOS). Our unit implemented fast-track protocols in six surgical specialties in 2010, and a previous audit evaluated initial success to produce recommendations. This audit aims to identify interventions, improvements and hindrances one year on.

Methods: From September to December 2011, pre-, peri- and post-operative data was collected prospectively. Primary outcomes were success rate (discharge on or before the intended day) and LOS.

Results: Success was again highest in gynaecologic surgery at 57.4% and lowest for upper gastrointestinal surgery at 25%. The largest improvement was seen in gynaecologic oncology surgery (22.3% improvement) with a 1.1 day decreased mean LOS. Mean LOS reduced for open liver resection and oesophagectomy by 3.2 and 3.7 days respectively, but increased by 2.6 days for laparoscopic colorectal surgery. Overall colorectal success decreased to just 34.4%, with distance walked on day 2 (P<0.018), drain use (OR 0.7; P<0.001) and early IV fluid cessation (OR 1.6; P=0.022) as significant predictors of success. Similar multivariate analysis was conducted for other specialties.