Objectives: To review the management of trauma patients.
Methods: Data from all trauma patients that were admitted to the Adult Intensive Care Unit (AICU) and Surgical High Dependency Unit (SHDU) at the hospital from 19/02/2011 to 19/05/2011 were collected (30 patients). The way these patients were managed from the time they were brought to A&E was looked at and data collected from trauma sheets and AICU/ SHDU clerking and daily review sheets. A Re-Audit was performed from 01/05/2012 and 01/08/2012 and a total of 30 were looked at.
Results: All patients had criteria for the activation of a trauma call. However, only 21 had calls put out. With regards to surveys; 19 patients had secondary surveys and only 2 patients had tertiary surveys done. 10 had ample histories taken, Pregnancy tests were checked appropriately and only 13 had admitting team consultant review in 24 hours.
The Re-Audit demonstrated a significant improvement in these aspects.
Conclusion: None of the patients were managed completely as per protocol in the first study. After becoming a trauma centre, set protocols were followed and a marked improvement was seen.

1446: OUTCOMES FOLLOWING EMERGENCY LAPAROTOMY: A COMPARISON OF PREDICTED POSSUM MORBIDITY WITH THE CLAVIEN-DINDO CLASSIFICATION OF SURGICAL COMPLICATIONS

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Aims: We aimed to collect data to assess outcomes in emergency laparotomies and to examine the correlation between predicted and actual morbidity.
Methods: Data was collected for 85 consecutive emergency laparotomies, from January-July 2012, including, 30-day mortality, length of stay, age of patient, POSSUM predicted morbidity and Clavien-Dindo (CD) classification of surgical complications.
Results: The median age was 69. The overall 30 day mortality was 9/85 (10.6%); 9/51 in those aged >65 and 0/34 in those aged <65 (p=0.0098). The median post-operative length of stay was 23 days (mean 33), and was greater in those >65 years (25 vs. 16 days) and those with a >50% POSSUM morbidity prediction (26 vs. 12 days). In addition to the 9 mortalities, there were 55 laparotomies with complications (65%). The severity of these complications correlated positively with the predicted POSSUM-morbidity score: The average percentage predicted POSSUM morbidity in all the patients who developed CD classification 1, 2, 3 and 4 complications were 31%, 62%, 78% and 93% respectively.
Conclusions: Emergency laparotomy is associated with a high risk of mortality and complications. This is especially evident in those aged >65 years or with a high POSSUM morbidity score

1463: IMPACT OF THE INTRODUCTION OF A COMBINED HAND TRAUMA SERVICE AT LEICESTER ROYAL INFIRMARY

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Introduction: Hand trauma theatre sessions for the plastics department were reduced as part of cost-saving measures. To compensate, the plastic and orthopaedic departments agreed to create a combined hand trauma service. We sought to compare patient outcomes before and after the introduction of this combined service.
Methods: An analysis of retrospectively collected data was performed for all hand trauma patients admitted to the plastic surgery department before the introduction of the combined service (July - September 2011) and for 1 month after (June 2012). Patient outcomes were compared in regards to time of injury to surgery, complications and emergency theatre use.
Results: A total of 215 patients were audited (n=164 pre-combined service, n= 51 post). Average age was 33 years, 75% male. Average time of injury to surgery increased from 2.2 days to 4 days (p<0.001) however use of emergency theatres decreased from 25.6% to 11.8% (p<0.05). There was no significant change in complication rates.
Conclusion: Although average time of injury to surgery increased, no change in complication rates was noted and use of emergency theatres dropped by more than 50%. The combined service also allows the unique opportunity for trainees to train under hand consultants of both specialities.

1467: THE GOLDEN PATIENT AND THEATRE PRODUCTIVITY

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The Golden Patient (GP) was introduced in our hospital in November 2012. It is the first patient on the next day's trauma-list, medically optimised for surgery and reviewed by an Anaesthetist the previous day. This decreases theatre start time delays whereby releasing theatre time for extra cases.
Prospective service evaluation which analysed the first patient on the trauma-list in the 2 months before GP, and the 2 months after the introduction of the GP and the GP checklist. Data was collected on whether medical and surgical optimising items on the GP checklist had been undertaken, and, the theatre journey times.
35 trauma-lists were analysed pre-GP and 35 trauma lists post-GP. The number of patients who had all items of the GP checklist completed increased from 65% to 98%. The mean time patient sent for theatre decreased from 08:43 to 8:20 (p<0.001). The mean anaesthetic start time decreased from 09:17 to 08:58 (p<0.001). 7 of the GP trauma lists accommodated an extra operation case.
The introduction of the GP to our trauma-lists has made a significant improvement to theatre start times. This simple concept has the potential to increasing the productivity of trauma centres and to increase theatre capacity.

1476: PAEDIATRIC DIAPHYSEAL FOREARM FRACTURES – TREATMENT MODALITIES AND OUTCOME

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Residual deformity following treatment of paediatric forearm fractures is often accepted. The ability of bone to remodel is diminished in patients over 10 years of age[1]. Minor residual deformity is associated with reduced range of movement[2]
We retrospectively reviewed patients admitted with a forearm fracture, who were 16 years or younger at time of injury. We collated data from notes and radiological archives. Union was defined as number of weeks to pain free examination, associated with sufficient radiographic evidence of callus. Residual alignment was divided into 4 categories; angulation <10 degrees, angulation >10 degrees, translation <50% and translation >50%. 64 patients (mean age 8.2 years), were admitted. Male to female ratio was 39:25. 43 (67%) underwent manipulation under anaesthetic (MUA) and splinting, 11 (17.5%) elastic intramedullary nailing (EIN), 9 (14%) open reduction internal fixation (ORIF). The remaining 1 (1.5%) had mixed methods. 22% suffered complications. At discharge, 72.5%, 18% and 10% of MUA, EIN and ORIF patients respectively had residual deformity. All patients clinically united. MUA is associated with higher rates of deformity. EIN provides less deformity but entails a second procedure to remove nails. The relationship between residual deformity and functional outcomes needs further study.

1489: BIOMECHANICAL ANALYSIS OF AXIAL AND ROTATORY FORCES ON VARIOUS MODES OF WEBER B ANKLE FRACTURE FIXATION

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Patients are invariably are made to non-weight bear after surgical fixation of Weber B ankle fractures as it is perceived weight bearing may result in displacement of fracture fragments. We conducted a biomechanical experiment to find out if it was possible to commence full weight bearing straightaway, or weather a protected weight bearing would be an option. We compared six surgical stabilisation techniques for such oblique fracture patterns using synthetic sawbones of osteoporotic consistency. Fractures were created and after fixation of sawbones with the above-mentioned techniques, they were placed in the mechanical testing machine (Mini-Bionix 858) and loaded with compressive and torsional force. Digital image correlation (DIC), a camera technique was used to assess the local displacement. Experiment on each construct was repeated four times.
We conclude that based on the biomechanical experiments it may be possible to allow weight bearing straight away after fixation of lateral malleolus fractures with lateral plate constructs. In carefully selected patients it may be possible to allow them to mobilise out of plaster straight away however it would be advisable to rehab them in a walking boot until the fracture unites without need of a plaster.