0582: BANDAGE: THE FREE, PAPERLESS, OPEN SOURCE, INTEGRATED PATIENT DATA MANAGEMENT SYSTEM

Angus Joyce1*, Sarah Aldugman1, Natasha Castellino1, Pavlos Christodoulou1, Dominik Dotzauer1, Mohammed Kamal2, Farhana Kapasi1, Omid Sadeghi-Alavijeh1, Jane Sanders1, Adam Sawyer2, Abeda Sultana1, Ismail Vokshi1, Natasha Castellino1, Pavlos Christodoulou1, Dominik Dotzauer1, Mohammed Kamal2, Farhana Kapasi1, Omid Sadeghi-Alavijeh1, Jane Sanders1, Adam Sawyer2, Abeda Sultana1, Ismail Vokshi1.

Introduction: Paper records systems are time consuming, expensive, and require significant infrastructure, making them impractical when dealing with large numbers of patients. We set out to design a paperless patient management system that could be deployed easily in a hospital or disaster setting; one that could be used and modified freely by anyone, and would significantly reduce healthcare costs whilst improving safety.

Methods: Our interdisciplinary team included experience of paper-based and paperless patient management systems internationally. We identified critical elements that should be present in a patient record system, reviewed common problems that were encountered, and examined technologies that could be modified to streamline data entry and access.

Results: We designed Bandage to address these problems and allow end-user customizability through the use of plug-ins, which add new features to the basic program architecture. We intend to crowd source Bandage's creation as a free Linux platform, which could run on any computer, tablet or smartphone, and will incorporate robust PGP encryption to ensure patient confidentiality.

Conclusions: Duplication of effort and loss of information would be eliminated by integrating the clerking, drug chart, notes, and discharge summary. By reducing workload, more time becomes available for patient contact, improving care and patient satisfaction.

0698: WORKING TOWARDS SAFER POST-OPERATIVE CARE OF PATIENTS FOLLOWING UPPER AND LOWER LIMB TRAUMA: IT SOLUTIONS FOR OPERATIVE DOCUMENTATION CAN IMPROVE THE QUALITY OF MULTIDISCIPLINARY COMMUNICATION

Rebecca Nicholas1, Rosalind Brock4, Ruth Bennett2, John McMaster1.

1Oxford Radcliffe Hospitals NHS Trust, Oxford, UK; 2Oxford University Medical School, Oxford, UK; 3London School of Surgery, London, UK; 4Royal Berkshire Hospital, Reading, UK.

Introduction: We evaluated the quality of operative documentation against the needs of the multidisciplinary team (MDT) and recognised professional standards. We engaged the MDT and used IT systems to drive improvement in this crucial element of safe patient care.

Method: Interviews were conducted with nurses, doctors, physiotherapists, occupational therapists and ward clerks to establish what information was needed from operative notes to deliver safe post-operative care. Together with the RCS (Eng) Guidelines, these standards formed the basis of evaluation. We analysed operation notes of 42 consecutive proformas for operative documentation, which was adopted across the trauma service. Re-audit was performed the following year to complete the cycle.

Results: At initial audit 58% of operation notes were electronic, increasing to 93% at re-audit. There was dramatic improvement in the inclusion of post-operative instructions including dressing instructions (14% to 71%) and follow-up (55% to 74%)

Conclusions: IT systems can be used to drive dramatic improvement in the quality of operative documentation, facilitating effective multidisciplinary communication, accurate handover and the delivery of safer patient care.

0847: AN AUDIT OF AUDIT PERFORMANCE

C. Jukes1*, E.J.C. Dawe, G. Hill. Frimley Park Hospital NHS Foundation Trust, Frimley, Surrey, UK.

Introduction: Only 17-29% of audits performed by orthopaedic departments complete the audit cycle, the implications being that trainees spend much time and effort on ineffective projects that don't impact on service. We aim to determine how many orthopaedic audits at our institution complete the cycle and meet best practice criteria.

Methods: Retrospective analysis of project reports and presentation slides. NICE definition for clinical audit was used as a standard, and Healthcare Quality Improvement Partnership (HQIP) Criteria for Best Audit Practice were used to assess quality.

Results: Between July 2011 and March 2013, 32 projects were identified with only 17(53%) considered audits by NICE definition. The remainder were research projects and were excluded. Of the 17 audits: 12(71%) used clear standards/guidelines; 15(88%) attempted any recommendations for improvement; 8(47%) completed the audit cycle with 7(41%) demonstrating improvements in service. Only 5(29%) fulfilled HQIP best practice criteria.

Conclusions: Disappointingly few audits closed the loop, however nearly all that did demonstrated improvements in service, highlighting the effectiveness of well executed audit. By adapting our audit practices to promote audit completion, trainees can benefit by having participated in effective audit that is more likely to lead to improvements in patient service.