

Conclusion: The presentation will describe deployment in field hospital use (Oct 2016), and also during a formal assessment of the Xenplate system by the World Health Organization in a large-scale multi-day disaster simulation in the UK (Dec 2016), together with plans for future development.

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Establishing mHealth Injury Surveillance Systems in Kenya

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Study/Objective: To use the mHealth injury surveillance tool to improve data quality, reduce feedback time, enable data sharing and improve the efficiency of the existing process.

Background: Trauma registries play an integral role in injury surveillance, and in the monitoring and evaluation of trauma care. Success in establishing and maintaining trauma registries is limited in low-resource settings. Efforts have been made to establish hospital-based trauma registries at multiple sites in Kenya. Data was initially collected on a paper form upon patient interview, later transcribed into computer software, and exported monthly for review and analysis. Challenges included: missing data, errors in transcription, backlog of data entry, and lack of reliable software for data management and export.

Methods: A literature review was performed for low-cost and freeware solutions, taking into consideration ease of programming and functionality to the end-user. Using FormEntry, the existing paper surveillance tool was adapted for mobile devices, and designed for real-time upload to a web-based database upon completion of each entry.

Results: Successful registries have been established in five sites in Kenya with a patient population of 24,000 over a period of two years. Feedback from end users was positive, with increased efficiency of the process from data collection to analysis. In addition to expected outcomes, the use of mobile technology has decreased human resource requirements, while increasing interest and awareness for the program.

Conclusion: Trauma registries are an important source of injury surveillance data and developing quality of care processes. The use of appropriate mHealth injury surveillance tools can be used to bridge the data gap in low-resource settings such as Kenya with further potential to scale-up.

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Development of an Electronic Patient Record Structure for use in a Disaster Response

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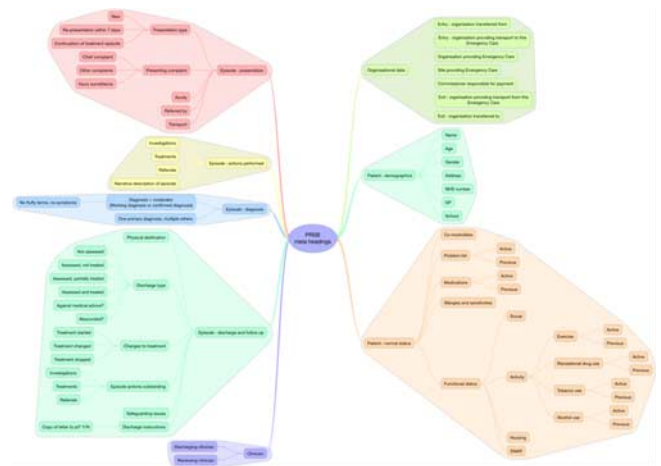
Study/Objective: Analyzing and optimizing the response to a disaster is made very difficult by the use of unstructured data captured on paper. Such data is difficult to aggregate and analyze in a consistent and meaningful manner – both in real-time for management and clinical quality assurance, and afterwards for comparative analysis and ‘whole system’ learning to improve disaster management.

Background: The SENDAI framework challenged the disaster management community to standardize core medical data in disaster situations; however it is not always clear what should be collected. If poorly designed, the data fields overlap and duplicate each other, which results in frustrated clinicians and dubious analysis.

Methods: We describe how the UK-EMT has tackled this challenge, building on the data-set work that has been coordinated by WHO. We have worked with informatics experts from the Royal College of Emergency Medicine, to develop a data set based on the UK National Health Service ‘Emergency Care Data Set’ (ECDS) that is being implemented across England in 2017.

Results: Every care episode includes a ‘chief complaint’, a measure of acuity (P1/P2/P3), investigations, treatments and a diagnosis and discharge/follow-up arrangements. The UK-EMT form codes into this structure, enabling reliable analysis – both real-time and post-hoc.

Conclusion: The scale of the NHS (25 million ECDS episodes per year) will enable evidence-based pathways, outcomes, patient information and decision support to be adapted for use in a disaster response where appropriate. A key principle in the NHS ECDS is that although acute/emergency care as a whole is nonlinear, each episode of care is linear (see diagram), and episodes can be linked to understand how people are using health care. The same principles apply in a disaster response and adapting the ECDS record structure has enabled rapid progress to a usable electronic clinical record. The data structure is shown in this diagram:



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High Prevalence of Acute Pancreatitis during the Ramadan Fast

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Study/Objective: Our study tried to identify different patterns of occurrence during the Ramadan fast of Acute Pancreatitis (AP).

Background: Acute Pancreatitis (AP) is an acute inflammatory process of the pancreas. The aim of this study is to retrospectively screen and record the Muslim and non-Muslim patients, admitted to the emergency department with acute pancreatitis over a ten-year period, in order to identify different pattern of occurrence during the Ramadan fast.

Methods: The study was conducted at the Emergency Department of Rabin Medical Center (Beilinson campus) in Petach Tikva, Israel. We compared the occurrence ratio of AP in Muslim populations and non-Muslim populations during the Ramadan fasting days, versus the rest of the year. We reviewed the medical records of Muslim patients admitted to the emergency department during the Ramadan fast period, to identify those who had reported that they fasted. In order to calculate prevalence of acute pancreatitis, we recorded the overall admissions to the emergency department during the years 2006–2016, of Muslim and non-Muslim patients.

Results: Over the 10-year study period, 1,167 patients were admitted to the emergency department with a diagnosis of acute AP. The number of patients with AP during the Ramadan periods were statistically significance between the non-Muslim and the Muslim groups 95 (8.8%) patients vs. 17(17.3%) patients, $p = 0.01$, respectively). The prevalence of AP during the Ramadan periods among Muslim were 11.28 for 10,000 vs. 8.9 for 10,000 for Muslims in other periods vs. 7 per 10,000 for the cohort population in ant period ($p < 0.001$).

Conclusion: We found a high prevalence rate of acute pancreatitis in the Muslim population during the Ramadan fast. Physicians should be aware of this link and suspect it, for Muslim patients presenting with epigastric pain during the Ramadan fast. The proposed mechanism for the development of pancreatitis is acute gastric dilation.

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Patient Safety in Greek Hospitals

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Study/Objective: This paper aims to investigate the problem of patient safety in Greek hospitals.

Background: Safety issues for hospitalized patients have been a great concern for health care providers over the last 15 years. In developed countries, one in 10 patients experiences the

consequences of a medical error during hospitalization. The World Health Organization (WHO) defines patient safety as their protection from preventable injuries that occur during the provision of health care, and at the same time, it sets patient safety as a world priority regarding health issues.

Methods: Greek and international publications in PUBMED during the last 10 years, and data collected by highly certified international organizations (WHO, OECD, HCDCP, JC, and AHRQ), have been extensively reviewed. We also present the results of a small indicative questionnaire on Hand Hygiene. **Keywords:** “Patient safety;” “Medical error;” and “Greek Hospital.”

Results: The majority of Greek citizens believe that health care services provided in the country are inferior compared to countries of the European Union. In most hospitals, there are neither established protocols on the safe management of patients nor integrated reporting systems of the adverse events. Informed consent is inadequate. Prescription of antibiotics is two-fold compared to the average rate in the OECD countries. The shortage of nursing staff worsened after the economic crisis emerged. The average number of nurses per 1,000 residents is 3.6, compared to 9.1 in OECD countries. Burnt out syndrome is reported by 78% of the nursing staff. The most of medical errors are reported by Surgery and Obstetrics (20% and 16%, respectively). On the other hand, there is good monitoring and recording of adverse events in blood transfusions.

Conclusion: It is obvious that we need better education, development of reporting systems, supportive work environment, loyal implementation of internationally recognized practices, and collaboration among the different health care structures.

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An Epidemiological Survey Correlating with Survival Probability in Cases of Abdominal Trauma in a Rural Setup

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Study/Objective: The study was designed to assess epidemiology of abdominal trauma in a rural setup, and correlate it with survival probability of the patient, through revised trauma score.

Background: Trauma is a major public health problem in every country, with abdominal trauma being 3rd most common. The profile and pattern of abdominal trauma is changing with a progressing civilization. Understanding mechanisms of injury is crucial, while managing a patient with abdominal trauma. An epidemiological assessment of trauma can help to predict mortality and morbidity. Early diagnosis, sound clinical judgement and prompt intervention in abdominal trauma is necessary. **Methods:** The study comprised of 50 patients of abdominal trauma attending the emergency department, in whom the epidemiological profile of trauma was recorded as ‘per prescribed proforma’, and later correlated with revised trauma score and survival probability.