Methods: This presentation is derived from research focussing on ED overcrowding, including the author's PhD on defining ED attendance appropriateness, which utilized a Mixed Method research approach incorporating Delphi survey methodology and analysis of qualitative free text responses, as well as subsequent systematic literature reviews and ethical analysis of identified core issues. An international perspective is presented, with the use of a New Zealand health system exemplar.

**Results:** There are specific risks associated with current responses to patient redirection – these include clinical, professional, legal and ethical risks. These risks are disproportionately spread across the key stakeholders in this process (patients, medical staff, managers), with limited recognition of these risks.

**Conclusion**: There is insufficient research and audit follow-up associated with the introduction of many overcrowding mitigation processes. Tendencies exist to focus on a 'quick fix', a highly visible responses to manage primary care patients, which may not be the best use of resources.

Prehosp Disaster Med 2017;32(Suppl. 1):s34–s35 doi:10.1017/S1049023X1700108X

## The Lack of Supra-Specialty/Specialty of Emergency Medicine in Greece: The Necessity, The Steps, The Problems, and the Delays

Helen Pavlidou<sup>1</sup>, Leonidas Liakopoulos<sup>2</sup>, Georgios Soufras<sup>1</sup>, Agis Terzidis<sup>3</sup>, Emmanouil Pikoulis<sup>3</sup>, Theofilos Rosenberg<sup>3</sup>

- 1. Emergency Dpt., General Hospital of Patras, Patras/Greece
- 2. Health Center K. Achaia, Patras/Greece
- 3. Surgery Dpt., National and Kapodistrian University of Athens, Patras/Greece

Study/Objective: The reasons of necessity and the lack of Emergency Medicine Specialty in Greece.

**Background**: Emergency Medicine is a relatively new specialty that constantly develops all around the world. The World Health Organization (WHO) encourages governments to support the development of health services related to Emergency Care, and acknowledging the continuously increasing burden of trauma and other emergency cases. Patient visits to the Emergency Care Units are rising, mostly due to the complications of chronic diseases presented by the growing geriatric population.

Methods: We extensively reviewed the Medline-Pubmed electronic databases from 2005-2015, as well as published data in government Greek and international websites related to Emergency Medicine. In addition, we conducted online research using a small questionnaire addressed to the Greek doctors regarding their opinion about Emergency Medicine and the emergency departments. Data are included. Keywords: "Emergency Medicine Specialty;" "Emergency Departments;" "development;" "prehospital emergency medicine;" "emergency health care;" "Greece."

**Results:** The European Society of Emergency Medicine (EUSEM) has made special efforts to establish the specialty of Emergency Medicine (EM) in Europe, and a joint training program. Specialty or subspecialty of EM have not officially

been established, although Greece is officially represented in EUSEM since 2007 by the Hellenic Society of Emergency Medicine. Training in EM is inadequate and not well organized. Recent economic crisis with subsequent frequent government changes, the lack of support from other specialties, and the cutbacks concerning health expenses have hindered the continuation of the efforts towards the recognition of the specialty.

**Conclusion**: Our data indicates that Greek doctors strongly support the establishment of the specialty in EM. Under these unfavorable conditions, we should continue the efforts of establishing the specialty, through integrated and documented suggestions, aiming to achieve the provision of high-quality and efficient emergency care to the patients. Improving public health is a priority of any organized society.

Prehosp Disaster Med 2017;32(Suppl. 1):s35 doi:10.1017/S1049023X17001091

h:10.101//51049023A1/0010

# Turning the Heat Up on Admissions: The Impact of Extreme Heat Events on Hospital Admissions

Kaitlyn Porter, Judith Singleton

School Of Clinical Sciences, Queensland University of Technology, Brisbane/QLD/Australia

Study/Objective: This study aimed to investigate the impact of extreme heat events on the admissions to the Royal Hobart Hospital (RHH), Tasmania for the period January 2003 to December 2010. The objective of this study was to determine if extreme heat events lead to an increase in hospital admissions. Background: Extreme heat events are increasing in frequency and duration and cause more deaths in Australia than any other extreme weather event. The total economic cost of extreme weather events in Australia each year is estimated at \$6.3 billion with this figure expected to double by 2030. Extreme heat increases the number of presentations to emergency departments and the mortality and morbidity rates. Emergency departments across Australia have experienced a steady increase in presentations over the years with spikes occurring during disaster events. In 2012-2013, Tasmania had the largest percentage increase in emergency department presentations of all the Australian states; there were 147,064 presentations equating to a 3.8% increase on the previous year. This increase in public hospital emergency department presentations across Australia has led to overcrowding of emergency departments.

**Methods**: Non-identifiable RHH emergency department data and climate data from the Australian Bureau of Meteorology were obtained for the period 2003-2010. Statistical analysis was conducted using the computer statistical software 'R' with a Distributed Lag Nonlinear Model (DLNM) package used to fit a quasi-Poisson generalized linear regression model.

**Results:** The Relative Risk (RR) of admission to RHH during 2003-2010 was significant when temperatures exceeded  $24^{\circ}$ C (75.2 F). The peak effect was noted one day after an extreme heat event (P < .05) with a lag effect lasting 12 days. These results highlight the significant impact extreme heat events have on hospital admissions.

**Conclusion:** This study identified the increased demand placed on a tertiary referral public hospital emergency department during extreme heat events and the potential for overcrowding.

Prehosp Disaster Med 2017;32(Suppl. 1):s35-s36 doi:10.1017/S1049023X17001108

### Impact of Evaluating Patients in Chairs on Emergency Department Length of Stay

Sudhir Baliga<sup>1</sup>, Randy Bitrus<sup>1</sup>, Seth Krupp<sup>1</sup>, Michael Nauss<sup>1</sup>, Michelle Slezak<sup>1</sup>, Suzanne Schlacht<sup>1</sup>, Sherry Bloodworth<sup>1</sup>, Howard A. Klausner<sup>2</sup>

- 1. Emergency Medicine, Henry Ford Hospital, Detroit/MI/United States of America
- 2. Emergency Medicine, Henry Ford Hospital, Detroit/MI/United States of America

**Study/Objective:** Determine if evaluating low acuity Emergency Department (ED) patients in chairs can decrease Patient Length of Stay (LOS) and if it impacts other low acuity patients' LOS.

**Background**: EDs can utilize an urgent care area to create space for sicker patients. Despite this, overcrowding still results and leads to increased patient LOS. One potential solution is to evaluate patients in chairs as opposed to stretchers.

Methods: This prospective case-control study took place in an inner-city ED with an annual census of 95,000. From January 6 to February 9, 2016, patients with low acuity complaints with anticipated short LOS were placed in chairs for their entire stay. Over 15 complaints were included. A specific nurse and care provider were assigned to these patients. Each study patient was matched with a case control with the same complaint from one year prior. Independent-samples Welch's t-test was used to analyze the data.

**Results**: Overall, 258 patients were included in the study. There were no statistical differences in age, gender, race, or resource utilization between cohorts. Patients seen in chairs had an average LOS of 101 minutes compared to the case control cohort of 138 minutes (p < 0.001). Patients seen in chairs with complaints of extremity injury, cough, dental pain, otalgia, ocular complaints, and genitourinary complaints had an improvement in LOS compared to their cohorts (p < 0.05). Also, during the study period 2,369 patients were seen in the fast track area with an average LOS of 172 minutes. This compares favorably with the year prior which saw 2,022 patients with an average LOS of 178 minutes. Average fast track LOS was decreased despite a 17% increase in total number of patients seen.

**Conclusion**: Treating certain low acuity patients in chairs can decrease patients' LOS and potentially improve throughput of all patients in the urgent care area.

Prehosp Disaster Med 2017;32(Suppl. 1):s36 doi:10.1017/S1049023X1700111X

Stakeholder Views on Emergency Department Operational Challenges: Causes and Potential Remedies Dagan Schwartz

Emergency Medicine, Ben-gurion University, kiryat-Ono/Israel

**Study/Objective:** To assess Emergency Department (ED) and hospital management views regarding major ED operational challenges, factors causing them and ways of overcoming them.

**Background:** The ED is the main hospital gateway and the initial site for diagnosis and emergency medical care. In recent years, ED overcrowding has worsened in Israel and worldwide. Overcrowding has been shown to adversely affect patient service and care, fostering patient and caregiver dissatisfaction as well as lowering quality of care metrics, such as: time to pain control and time to antibiotic care and even increasing mortality.

Methods: Stakeholder views on ED operational challenges can provide insights to the major challenges, their causes and ways of overcoming those challenges. Additionally, differences in perceptions between the stakeholders may themselves present a challenge. Face to face semi-structured interviews were conducted with 51 ED head nurses, ED directors and hospital directors of the 17 busiest EDs in Israel.

**Results:** "Overcrowding" was assessed by interviewees to be the most prevalent and acute operational problem, followed by prolonged waits and lengths of stay. Interviewees considered overcrowding a symptom of other operational difficulties, but also a cause of additional operational and clinical difficulties. While few interviewees attributed operational difficulties to suboptimal process management and decision making, many suggested improving operations management, within the ED and in its hospital interactions as promising interventions. Despite agreement on most topics, a major view difference between ED and hospital managers concerned the importance of interventions to minimize ED boarding.

**Conclusion:** All three interviewee groups mostly agreed with each other and with the recent literature regarding operational challenges and their causes. Disagreement was noted regarding minimizing ED boarding. Most interviewees suggested improving operations management within the ED and in its interfaces with the hospital.

Prehosp Disaster Med 2017;32(Suppl. 1):s36 doi:10.1017/S1049023X17001121

### The Affordable Care Act and Changes in Emergency Department Usage between Two Michigan Hospitals Howard A. Klausner<sup>1</sup>, Randy Bitrus<sup>2</sup>, Amanda Robicaurd<sup>2</sup>, Alex Poznanski<sup>2</sup>

- 1. Emergency Medicine, Henry Ford Hospital, Detroit/MI/United States of America
- 2. Oakland University, Rochester/MI/United States of America

**Study/Objective:** This study's objective is to evaluate how the Affordable Care Act (ACA) has affected Emergency Department (ED) admissions, rates, and total annual visits.

**Background**: The ACA has provided individuals the ability to obtain health insurance. If the ACA has an impact on ED utilization is unknown.

Methods: This retrospective observational study occurred at two hospitals in Michigan. One hospital is urban-based in Detroit, Michigan with an ED annual census of 95,000. The other is a suburban hospital in Grosse Pointe, Michigan with an

#### Prehospital and Disaster Medicine

Vol. 32, Supplement 1

s36