

**Results:** Out of a sample of 1,211 Tehran residents, 31.4% demonstrated “poor” knowledge of disaster preparedness. For 31.4% of the sample, the knowledge assessed “moderate”, and the remaining 37.2% had an “acceptable” level of knowledge. The relative frequencies of people with poor, moderate, and acceptable attitude were 25.6%, 32.5%, and 41.9%, respectively. Regarding practice, the percentage of the subjects that were determined to be at a “poor” level was 25.7%, while 29% fell into the “moderate” category, and 45.3% were classified as having “acceptable” practice in terms of disaster preparedness. Statistical analysis of the KAP scores was used to identify the following groups as being at “high risk” for adverse consequences in the event of an earthquake: women, housewives, residents of eastern districts, senior citizens, pensioners, those living alone, poorly educated people, and people living in a rented accommodation or in crowded families.

**Keywords:** earthquake; knowledge, attitude, and practice (KAP); preparedness; public education; residents

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### (214) Handling Crisis or Risks

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A disaster occurs when routine disruption becomes a precise instant in which a hazard reveals itself. Some disaster examples from Argentina include the 2003 Santa Fe floods and the Cromagnon nightclub fire in 2004. Crisis management mechanisms must be improved. This includes setting out organizational priorities to deal with mental health, continuing launched programs, training activities for farm workers, introducing psychosocial aid measures for the assistance of victims and other parties, and lowering risk so that stress does not leave irreparable harm.

A comprehensive risk reduction approach must be promoted. This mitigates impacts by calling on all of the members of a society to make agreements through a strategic plan on the integral measures taken against risks, including responses.

The plan requires the collaboration of different professionals, response groups for emergency and disaster prevention, the involvement of governmental and non-governmental actors, and the participation of the population affected by or vulnerable to tragedies that have occurred in Argentina during the last 25 years. Direct observation of human behaviour in rescue missions, training activities, tests on rescuers, and statistical data must be considered and reviewed.

In this sense, an emergency or disaster is the degree of risk in a society. For this reason, the implementation of a comprehensive risk reduction approach is essential.

**Keywords:** Argentina; disasters; disaster planning; mental health; risks

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### (215) Sickle Cell Patients in the Emergency Department: Report of a Multidisciplinary, Quality Improvement Initiative at an Urban, Academic Hospital

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Sickle cell disease (SCD) is one of the most prevalent genetic diseases worldwide. It affects an estimated 70,000 Americans and healthcare expenditures total (US)\$475 million annually.<sup>1–3</sup> Pain is the most common cause for adult patient hospitalization, accounting for >90% of emergency department visits.<sup>1,2</sup> It is hypothesized that combining the standardization of SCD care in the emergency department with a multidisciplinary, clinical approach will improve patient satisfaction and reduce the cost of care at the emergency department.

Developments include: (1) a standardized emergency department, SCD pain protocol; (2) brief motivational interviewing; and (3) a new multidisciplinary SCD clinic. Clinic referrals will be mediated by social workers, and the clinic team will assist both emergency department patient management and follow-up care.

Statistical process control charts that track monthly intervals will be used in the ongoing evaluation of quality improvement initiatives. Data will be collected on the following: (1) the number of emergency department visits; (2) the number of emergency department patients admitted; (3) length of stay prior to discharge from emergency department; (4) patient satisfaction with emergency department care; and (5) the number of times patients returned to the emergency department within seven days of first admittance. Financial outcomes measured will include: (1) total emergency department charges; (2) reimbursement; (3) cost of care; and (4) net loss.

Baseline emergency department data from January 2005 to August 2006 was collected. There were 341 SCD presentations by 55 patients with a 14.4% admission rate and 20.5% return-rate to the emergency department. Approximate emergency department billing data for pain crisis (excluding admitted patients) totalled \$600,000, with \$145,000 for cost-of-care and a >\$90,000 net loss.

**References:**

1. Ballas SK, Lusardi M: Hospital readmission for adult acute sickle cell painful episodes: frequency, etiology, and prognostic significance. *Am J Hematol* 2005;79(1):17–25.
2. Davis H, Moore RM Jr, Gergen PJ: Cost of hospitalizations associated with sickle cell disease in the United States. *Public Health Rep* 1997;112(1):40–43.
3. Marlowe KF, Chicella MF: Treatment of sickle cell pain. *Pharmacotherapy* 2002;22(4):484–491.

**Keywords:** emergency department; financial outcomes; hospitals; quality improvement; sickle cell disease (SCD)

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### (216) Patient Advocates: Linking Emergency Department Patients to Medical Homes

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**Introduction:** The 14 neighborhoods surrounding the University of Chicago Hospitals (UCH) have Chicago’s highest rates of “ambulatory-care-sensitive condition” hos-

pitalization, and a lack of community-based care.<sup>1</sup> To address these concerns, the Southside Medical Homes (SMH) network began linking emergency department-patients with 18 community providers in 2004. The emergency department-based patient navigator is an integral component of this network. This study will illustrate the current and developing role of the emergency department-based patient navigator.

**Methods:** Six navigators at the UCH Emergency Department approached eligible patients flagged by the emergency department electronic tracking system. Patients were offered primary-care referral and treatment at appropriate dental, mental health, and substance abuse facilities. Appointments were scheduled, and pertinent emergency department medical data were faxed to the outlying sites. Navigator roles are expanding with SMH to include: (1) a focus on frequent user/chronic disease populations, such as sickle cell disease where advocates will expedite multidisciplinary clinical referral; (2) training to better inform patients about the specific benefits a “medical home” provides for preventive and psychosocial care; and (3) improvements to navigator and patient knowledge of community resources, such as health-education sites, vocational programs, advocacy agencies, and support groups.

**Results:** During the first eight months of 2006, 30% (11,612) of the emergency department patients were without a medical home, 2,279 appointments were made, and 816 were kept at the emergency department. The SMH network data demonstrate that patients return to their referred providers (38% of the patients have been seen  $\geq 2$  times).

**Conclusions:** The role of an emergency department-based patient navigator is evolving with the expansion of SMH to include: frequent-user population referrals, preventive health education, and utilization of community resources.

**Reference:**

1. Chicago Department of Public Health: Community Area Health Inventory, Part 1: Demographic and Health Profiles (July 2006). Available at [http://egov.cityofchicago.org/webportal/COCWebPortal/COC\\_EDITORIAL/CAHI\\_part1.pdf](http://egov.cityofchicago.org/webportal/COCWebPortal/COC_EDITORIAL/CAHI_part1.pdf).

**Keywords:** advocate; Chicago; emergency departments; medical homes; patient navigators

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### (217) Health and Welfare for Emergency Personnel in Major Disasters

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This presentation will define the requirements of an aid operation after an analysis of the principal characteristics of disasters. The conditions of emergency personnel and assistance teams will be described through practical experiences (tsunamis, forest fires, and earthquakes). The skills of the personnel and managerial staff will be analyzed, along with problems with security and safety. The physical, psychological, medical, and material aspects of security and safety have declined. In this presentation, the conditions resulting from conserving an operational workforce, action capacity, and mission target will be explained. The responsibilities of the team leader, risk manager, and chief medical officer will

be defined. The principal conditions of a successful mission are: (1) sanitation; (2) medical support; (3) housing; (4) restoration and catering; (5) camp hygiene; and (6) lifestyle. The goal of an effective assistance program (physical and psychosocial) and the economic cost of not caring for personnel who provide services during and after disasters will be demonstrated.

**Keywords:** care programs; disasters; emergency assistance; emergency personnel; safety

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### (218) Are Belgian Hospitals Prepared for a H5N1-Pandemic?

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**Objective:** Virulent airborne diseases can be a real burden to a nation's health system. The most recent threat is that of a mutation-induced H5N1-influenza pandemic. We studied whether Belgian hospitals are able to deal with H5N1-influenza infected patients in the case of a pandemic. Many patients, including children, may require artificial ventilation within 48 hours of admission.

**Methods:** A survey aimed at determining availability and preparedness was sent by e-mail to the different Belgian Emergency Departments (EDs).

**Results and Discussion:** Sixty-five hospitals were included. The number of patients being potentially admitted is limited by the reduced number of intensive-care beds equipped with automatic ventilators. Furthermore, the number of available intensive-care beds for children is still lower than for adult patients.

The number of mortuary places, in the case of a catastrophe, also is insufficient. Although most hospitals set up a disaster plan for H5N1, there are only limited stocks of antiviral medication to protect the hospital staff during the acute phase. A separate triage area only is available in a limited number of hospitals.

**Conclusions:** Belgian hospitals and EDs are not equipped sufficiently to deal with potential pandemic situations.

**Keywords:** Belgium; pandemic; preparedness; hospitals; emergency department; limitations

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### (219) Improving Public Health Emergency Response and Preparedness in India

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This paper discusses some of the strategies and challenges for successfully implementing the public health emergency response plan and preparedness in India. For disasters caused by natural and man-made hazards, the public health emergency response requires an innovative, trained, and committed workforce. Without adequate training, the response capacity of health agencies and communities in India, and their ability to respond effectively to a disaster is