donated for clinical courses and disaster medicine professionals donated training time. A regional conference was held to discuss regional activities and trends.

Minimal funding yielded great achievements including training courses for >1,200 medical responders, the creation of drill evaluation tools and videos, the establishment of training centers, an injury surveillance system, and the development of clinical pocket references. Networks were expanded through multi-country collaboration, and regional lessons were learned.

The sustainability of disaster preparedness and response must be accomplished in collaboration with the local stakeholders in planning, implementation, and evaluation. International non-governmental organizations can facilitate positive disaster preparedness and response outcomes in developing countries and maximize the expertise within the country. They can promote follow-up activities, evaluate drills and training, and be valuable in the process because of their networks and international associations. Through minimal funding, many results can be achieved. Drills and disaster training prove to be a valuable method of multi-stakeholder collaboration in disaster response.

Keywords: AmeriCares; drills; international non-governmental organizations; preparedness; training
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(H81) Major Influences on Hospital Emergency Management and Disaster Preparedness

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The role of hospitals in the community response to disasters has received significant attention during the last decade. In the event of a disaster, the community expects hospitals to provide acute care medical services to victims and healthcare resources to other facilities in need. There have been several initiatives to guide the hospitals' roles in these events, and to assist hospitals in their effort to prepare for them.

This project is focused on the efforts of four distinct groups: (1) The Joint Commission; (2) the executive branch of the United States government; (3) Congress; and (4) the Department of Health and Human Services. The objective is to determine the way these groups' initiatives affect hospitals and the healthcare system.

These four groups take vastly different approaches to meeting common goals. These approaches include operational standards, legislation, and guidance documents. Despite the different approaches used to assist hospitals in improving their emergency management capabilities, the initiatives reinforce each other and have resulted in an increased focus by hospitals on disaster preparedness, response capabilities, and community integration.

There is still significant work to be done with regards to improving hospital and healthcare system response capabilities. While community integration is critical to hospital response successes, there is a need for guidance designed for and directed specifically towards hospitals. The continued improvement of hospitals' response capabilities will depend in large part on the guidance and support of these four key groups.

Keywords: emergency management; hospital; preparedness; response
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(H82) Community Capacity Building in Earthquake Preparedness in Colombia: Lessons Learned from a Survey of Perceived Needs

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Background: A fundamental goal of community capacity building is to enhance the ability to prepare and respond to a major incident based on needs perceived by the local population in the "disaster fronts". Bogotá's (Colombia) District Health Secretariat Risk Management Office, accountable for the city's response to a disaster, has formulated a Medical Earthquake Preparedness Plan, which comprises community needs perception as one of the salient features to achieve higher training impact and effectiveness. Previously, top-down and command-and-control approaches were used, and proved to be ineffective.
Methods: A questionnaire-based survey is being conducted among residents of Bogotá who live in seismically active regions to assess their perceived needs for an earthquake disaster preparedness training program. The survey includes respondents' evaluations of their situation based on their experiences. Their perception of vulnerability and capacity will be explored. Training inputs will be sought in regard to the content and methodology of delivery of such programs. Descriptive statistics will be used to summarize the data. When appropriate, a two-tailed t-test will be used to compare the responses of various groups. A p-value <0.05 will be statistically significant.
Results: The results will be presented at the Congress.
Conclusions: Population surveys about earthquake preparedness training programs will lead to wider stakeholder participation, ensuring the sustainability of such efforts. This will strengthen the local community capacity to face hazards of a major seismic event in Bogota, Colombia.

Keywords: Colombia; capacity building; community; disaster; earthquake; lessons learned; needs; preparedness
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(H83) Utilizing Paramedics to Provide In-Hospital, Critical Care Surge Capacity

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Introduction: The emergency medical services (EMS) system is one of the key components in disaster, terrorism, and public health emergency response. In the United States, the paramedic is the most highly trained prehospital medical

provider, and directs patient care as part of the EMS system. These highly trained practitioners of advanced life support and critical care are supervised by emergency physicians and trained to operate independently in austere conditions with little supervision, and to perform highly skilled medical procedures.

Purpose: The literature has shown that up to one-third of the hospital work force may not report to work during a disaster or public health emergency. Not all types of disasters may require paramedics to perform their typical functions, leaving them available to perform additional duties. Large-scale studies have shown that the majority of paramedics would be willing to perform additional duties during disasters when EMS services are not required. Utilizing these providers in acute-care hospitals can serve as "force multipliers" by allowing limited nurses and physicians to care for a larger numbers of patients with reduced staff.

Conclusions: Models of the utilization of Paramedics in emergency departments, on hospital "Code" teams, and rapid response teams within a hospital will be discussed as well as the medical and legal issues concerning paramedics operating within a hospital. Examples of paramedics operating within medical clinics during Hurricane Katrina in 2005 will be presented. Proposed expanded scope of practice models, along with supplemental educational modules for altered standards of care will be discussed.

Keywords: critical care; disaster; emergency care; emergency medical services; hospital; paramedic; surge capacity
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(H84) Multidisciplinary Team Discharge Rounding Improves Daily Hospital Surge Capacity and May Benefit Disaster Preparedness

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Background: National emergency preparedness policy in the United States calls for hospitals to accommodate surges during disasters, but published studies have not evaluated the ability of existing resources to meet these goals. A large component of the capacity-to-demand mismatch is related to inpatient census. Solutions to effectively increase daily response capability and components exerting the greatest effects are needed. An experience with daily multi-disciplinary discharge rounds (MDR) in a Level-1 Trauma Center and the logistics of improving daily surge capacity will be presented.

Methods: A time-motion study was conducted in a major academic trauma center to characterize daily MDRs and quantify the causes of patient discharge delays. Multiple linear regression was used to study associations between topics and the duration of discussions.

Results: A total of 1,769 MDR discussions were observed for 23 days. The median number of patients discussed per day was 78, with a median rounding time of 34 minutes. Each discussion lasted a median of 13 seconds (2–233), with the majority (83%) <30 seconds, and only 4% <60 seconds. A total of 6.4% of the patient care plans were delayed due to clinical factors (18.3%) and system issues (81.7%). Patient length-of-stay was reduced by 15%, and this led to the elimination of bypass-status of hospital at all times.

Conclusions: Multidisciplinary discharge rounds lead to identifying system roadblocks and help increase daily surge capacity. This would not only benefit patient outcomes but also would ensure capacity building for disaster preparedness.

Keywords: capacity building; discharge; hospital; preparedness; rounds
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(H85) mumbaiVOICES: Citizen-Powered Analysis of Disaster Response Systems

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Introduction: mumbaiVOICES is a unique coalition developed in response to the serial bomb blasts in the suburban trains in Mumbai in July 2006. The Website forms the backbone of this project. It provides a means for ordinary citizens to have a say in their city's disaster planning process by sharing their experiences in an easily accessible public domain. The project will be launched again in January 2009 to analyze the response to the recent terrorist attacks in Mumbai.

Methods: The Website www.mumbaiVOICES.com allows visitors to share their recollections of the city's response by choosing from a list of pre-designed templates that encourage responders to log information most relevant to disaster analysis. The Website is publicized via a media campaign. The 2009 version includes a call-center that will record responses from citizens without Internet access. The audio clips subsequently will be uploaded online.

Analysis: A composite narrative collated from 160 testimonies recorded in 2006 stimulated a series of subsequent actions that led to the execution of the city's first inter-agency drill, the Mumbai Emergency Management Exercise (www.mumbaiEMEX.org), only weeks before the terror strikes in November 2008. The mumbaiVOICES 09 templates will help to examine the impact of the recommendations made by the earlier analysis.

Conclusions: Traditionally, disaster response analysis is expert-driven. mumbaiVOICES allowed ordinary citizens to partake in the city's preparedness system. The public private partnerships forged during the project evolved into a unique capacity-building exercise to implement recommendations gleaned from the people's narrative.

Keywords: citizen; disaster preparedness; Mumbai; Website
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