cation of EMTs; (4) moving the ambulance parking inside EMS stations; (5) using standby ambulances and EMS teams in crowded squares; (6) establishing an air ambulance (helicopter) in Tehran for rapid medical responses to highway scenes; (7) creating motorcycle teams for rapid medical response in crowded parts of the city; (8) setting up professional teams of nurses and general practitioners; and (9) having general practitioners inside dispatch room of EMS centers advise EMS teams.

By 2002, on-scene time for EMS teams from Tehran 115 center was almost 10–15 minutes (median = 10; mean = 15). This time was eight and five minutes for the standby ambulance and motorcycle routes, respectively. Also, the air ambulance had an on-scene time below eight minutes. Although there are still some problems and delays with EMS team duties, the critical on-scene time has dropped closer to the "golden time" of five to eight minutes.

Keywords: emergency medical services (EMS); Iran; on-scene time; traffic

Prehosp Disast Med 2005;20(2):s49-s50

Prospective, Cross-Sectional Analysis of Hospital Bed Surge Capacity in Selected San Diego Hospitals

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Introduction: Traditional strategies to determine hospital surge capacity have relied on cross-sectional, hospital census data. This likely underestimates the true surge capacity in the event of a mass-casualty incident.

Objective: To more accurately determine hospital bed surge capacity using physician and nurse manager assessments at multiple facilities.

Methods: Overnight and day shift nurse managers from each inpatient unit at four different hospitals were approached to make assessments on all patients under their care. Physicians at two academic institutions also were approached for comparison. Age, gender, ward type, and admission diagnosis were recorded. In addition, assessments were made for each patient as to their disposition at two, 24, and 72 hours following a mass-casualty incident. Transfers to a lower level of care, including a hypothetical "on-site nursing facility" or discharge to home were included. A physical assessment of each hospital also was made to determine whether enough space was available for patients transferred to the "on-site nursing facility." Data were reported descriptively, and comparisons were made between overnight and day shift nurses and between physician and nurse manager assessments.

Results: A total of 1,745 assessments on 776 patients by 82 nurse managers and 25 physicians from the four institutions were included. Nurse managers assessed approximately one-third of all patients as dischargeable at 24 hours and approximately one-half at 72 hours; one-quarter of patients were assessed as being transferable to an "on-site nursing facility" at both time points. Physicians were more likely than nurse managers to send patients to such a facility or discharge them, but less likely to transfer patients out of the intensive care unit.

Conclusions: A large proportion of inpatients can be discharged within 24 and 72 hours. Additional beds can be made available if an "on-site nursing facility" is made available. Both physicians and nurse managers should be included on the team that makes patient dispositions in the event of a mass-casualty incident.

Keywords: assessments; California; hospital beds; inpatients; mass-casualty incident; nurse managers; on-site nursing facility; physicians; San Diego; surge capacity; transfer

Prehosp Disast Med 2005;20(2):s50

Sensitivity and Specificity of Advanced Medical Priority Dispatch System (AMPDS) in Detecting Cardiac Arrests in Melbourne

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Introduction: To ensure that patients suffering from an out-of-hospital cardiac arrest receive maximal ambulance response, it must be identified as cardiac arrest by the emergency call taker. In Melbourne, the Metropolitan Ambulance Service uses the Advanced Medical Priority Dispatch System (AMPDS) to aid call taking.

Objective: This study aims to determine the sensitivity and specificity of the AMPDS in detecting cardiac arrest emergency calls in Melbourne and to analyze possible areas for improvement.

Method: Dispatch records for suspected cardiac arrests (priority zero) from January 2001 through March 2003 were compared with the Victorian Ambulance Cardiac Arrest Registry (VACAR). This identified those cardiac arrests that were identified correctly by AMPDS, the cardiac arrests not identified, and priority zero cases, which were not cardiac arrests. Where the dispatch code was inaccurate, further analysis was undertaken to identify possible areas for improvement.

Results: The sensitivity of the AMPDS in detecting cardiac arrest was 76.7% (95% Confidence Interval (CI) 73.6–79.8%), specificity was 99.2% (95% CI 99.1–99.3%). Cardiac arrests given lower priorities were allocated 58 different dispatch codes. No method for better identification of cardiac arrest was evident in the limited data available. Of the cases that were dispatched as priority zero, but which were not cardiac arrests, 37.2% had a Glasgow Coma Scale Score of 13 and normal or near normal ventilatory rate. Identifying this during emergency calls may reduce the dispatch of unnecessary maximal responses, reducing road hazards and allowing the more efficient resource use.