tolic blood pressure (76%), CO_2/$ETCO_2$ (5%) for all cases. Prehospital care standards were assessed and captured waveforms and trends are being analyzed in association with patient outcomes.

Conclusions: A fully operational VSB system has been effective in collecting prehospital trauma VS.

Further mapping the pre-hospital physiologic trends with outcomes show promise in improving patient triage and standards of trauma care.

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Keywords: air transport; emergency medical services; trauma; vital signs

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(N43) Improvement of Prehospital Medical Care System in Tbilisi 2005–2008

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Tbilisi, the capital of Georgia, has a population of 1,500,000. The Tbilisi First Aid Center conducts prehospital medical care.

Until 2005, the prehospital medical care system of the former Soviet Union in 2003 was financed partially by the state and partially by patients. The equipment was poor, ambulances defective, wages low, medications scarce, and communication inadequate. Cable or cellular telephones provided communication between the call center and substations. Communication was unstable and depended on subjective factors. There were many cases of late dispatches and unqualified medical care.

In 2005, the state began funding prehospital medical care. The main directions were education, equipment, and communication. Staff participated in an urgent medical care program; after testing, physicians were selected to continue working in prehospital medical care. For vacancies, competition for the position was announced and the board selected the physicians. At the same time, 50 Kia Picanto-type vehicles (Fast Car) were added, the call center equipment was upgraded with digital VHF transmitters, each ambulance was equipped with a VHF transmitter, equipment needed for urgent care, necessary medications, and a global positioning system. This allows the calls to be transmitted from the call center directly to the medical teams. The time of arrival to the patient was reduced to 8–12 minutes.

Today in Tbilisi, there are 70 prehospital medical teams in 13 sub-stations, with a total of 44 ambulances and 26 Fast Cars. The mean number of calls per day is approximately 900. The period of duty of the medical staff is 24 hours. Cases of late dispatch are minimal. The quality of prehospital medical care is controlled by the following parameters: (1) the time between call and arrival to patient; (2) adequacy of first aid; and (3) population satisfaction

The introduction of new technologies and retraining of medical staff gave rise to the improvement of prehospital medical care quality within the same funding conditions.

Keywords: emergency health; emergency medical services; Georgia; improvement; prehospital care

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(N44) Epidemiologic Profile of Victims of Firearms and Cutting Weapons in the Emergency Room in the Outskirts of Brasília

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Introduction: Violence management is one of the most important challenges in the Latin America health system. This study describes the epidemiologic profile of victims of trauma by firearm and cutting weapons with the intention of improving the hospital routines and allocation of resources, thereby increasing the efficiency of healthcare services.

Methods: Age, gender, type of injury, day of the week, and time of the day were considered in this study. The data were collected in 2005 from an emergency department at a hospital in Gama, located in the outskirts of Brasilia, the Brazilian capital.

Results: The first three months of the year had the highest average number of patients presenting to the emergency room, with 72 cases documented. Approximately 50% of the patients presented during the weekend and almost 66% of all of the incidents occurred during the nocturnal period. Adult males between 18–60 years of age had a higher prevalence (80%). Injuries caused by firearms were responsible for the majority of the presentations (66%).

Conclusions: It was possible to determine the epidemiological profile of the victims of injuries from firearms and cutting weapons. This information will help to provide better assistance to the provision of care in emergency rooms.

Keywords: Brazil; cutting weapons; emergency medical services; epidemiologic profile; firearm; violence; trauma

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(N45) Fastrach Laryngeal Mask Airway Management in Out-of-Hospital Critical Care Patients

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Introduction: This presentation will describe the epidemiologic profile of Fastrach Laryngeal Mask (FLM) intubations in out-of-hospital critical care patients attended by the Emergency System (ES) staff.

Methods: An observational, descriptive, and retrospective study of patients attended by the ES staff that required a FLM for airway management January 2002 to December 2007. Data were collected analyzing computerized clinical histories, including: (1) age; (2) gender; (3) medical or traumatic etiology; (4) first cardiac rhythm; (5) survival until hospital admission; and (6) the percentage of usage of this technique in the total amount of patients that required airway management.