

## Poster Presentations

### EXPERIENCE WITH AN IN-HOSPITAL, PHYSICIAN-OPERATED MOBILE EMERGENCY MEDICAL SERVICE IN A LARGE HOSPITAL

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**Background:** Many hospitals have a special emergency medical service (EMS) that is responsible for life-threatening emergencies outside the hospital's intensive care units, i.e. in the wards and in patient-treatment areas. In contrast, there is often no EMS caring for patients, visitors or personnel outside of these areas. In order to provide emergency medical care in the entire hospital area, we instituted an additional in-hospital EMS to cover the larger hospital area. We describe the structure of our in-hospital EMS and our experience in the first 26 months after its establishment.

**Methods:** Our hospital covers an area of 455 acres. 17 miles of streets and walkways connect 60 buildings. On an average workday, 1,250 patients, 4,200 employees and 4,600 medical students dwell on the hospital area, while another 10,000 pedestrians and bikers, along with 3,000 cars, cross the hospital area every day. The in-hospital EMS is available 24 hours and consists of a fully equipped ambulance staffed with two paramedics and an experienced anesthesiologist. If callers report an emergency anywhere in the hospital area to the hospital's security management, the team is dispatched to the scene. We analyzed the emergency protocols of all rescue missions, that had occurred within the first 26 months, and classified them according to type and severity of disease by using the NACA score.

**Results:** The EMS team responded to a total of 147 calls, including 3 missions in the immediate vicinity outside of the hospital. 7 calls turned out to be pranks. Of the total of 125 treated cases, type of disease and NACA score are depicted in the tables. 101 of the patients treated at the scene had to be admitted to the hospital's emergency room, including one drug-addicted person who was found in cardiac arrest in the parking garage and, despite a core temperature of 79°F, was successfully resuscitated.

**Conclusion:** Since its establishment, knowledge of the existence of our in-hospital EMS has steadily increased within the hospital community. As a consequence, the number of events has likewise steadily increased. We believe that a total of 20.4% life-threatening events (NACA 4-6) underscores the importance of the EMS in our large and extended hospital area.

Type of disease (total n=125)	n
Internal	59
Sudden cardiac arrest	15
Intoxication (drugs, alcohol, etc.)	14
Neurologic	13
Surgical	8
Accident (traffic, at work)	7
Other	9

NACA score (total n=125)	n
I (minor disturbance)	16
II (ambulant care)	38
III (overnight hospital stay required)	35
IV (danger to life possible)	11
V (acute danger to life)	7
VI (resuscitation)	12
VII (death)	6