Emergency medicine
in Romania
system & personnel
1990 – 2009

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CHAIN OF SURVIVAL For Critical Patients

ACCES → First Response → Early Defibrillation → ALS → Hospital

Communications
Romanian system in 2009
Integrated dispatch center
Integrated dispatch center
First responders
First responders
Advanced Life support
Advanced life support
Prehospital
emergency dept.
Integrated ed
Emergency dept.
telemedicine

- Pre-hospital to ED or dispatch
  - (700 type B ambulances)
  - EKG real time monitoring
  - 12 lead EKG
  - Pulse-oxymetry
  - Blood pressure

- Hospital to hospital
  - (40 small emergency rooms to main regional emergency department)
  - Video and audio
  - EKG real time monitoring
  - 12 lead EKG
  - Pulse-oxymetry
  - Blood pressure
  - Ultrasound (in the future)
Telemedicine solution using VPN-GPRS data transmission

112 Integrated Dispatch Center
Field
First response unit

BTS  BSC  SGSN  GGSN

Field
First response unit

DHCP  Security  Server  DNS  Gateway
Telemedicine
The emergency system actors in Romania

- GPs
- Nurses
- Ambulance drivers
- Midwives

- Dispatchers
  - Medical
  - Integrated call taking and dispatching

- Fire fighters
  - Paramedics - EMTs
  - Basic life support

- Nurses
  - No special training for the moment
  - Will be trained for 3 months in EM

- GPs - 6 month training

- Emergency medicine specialists - 5 yrs training
  - Emergency medicine
Romanian system in 2009

- **Legislation in Emergency medicine**
  - Main health reform law in 2006 includes a chapter on emergency medical care
  - Secondary legislation between 2006 and 2008
    - Establishing competencies for different levels of pre-hospital emergency care teams
    - Standardization of different levels of ambulances
    - Standardization of emergency departments and establishing functioning rules, equipping etc.
    - Classification of hospitals in accordance of their level of emergency care capacity into 4 levels.
    - Establishing transfer protocols for
Disaster preparedness
Disaster preparedness
disaster
PREPAREDNESS
Disaster preparedness
Training – evaluation

• Training centers for first responders / paramedics under the coordination of the fire service

• Simulation centers for doctors and nurses at emergency departments
  • Full simulation using sim-man and baby-sim
  • Virtual computer simulation
  • Ultrasound simulation (6 centers / WB project)

• Special training for GPs and nurses working actually on ambulances (6
Simulation center
Training - evaluation
Training - evaluation
Training - evaluation
Training - evaluation
Training – evaluation
Conclusions

- Emergency medicine is evolving allover the world, being at different stages in different countries.

- There is no perfect solution or perfect system.

- It has to be developed based on international experience taking into account local aspects.

- There are no unique countries or cities or regions. There are just local solutions based on global concepts!!!

- Training / monitoring / evaluation are basic requirements for any emergency system.