Emergency Medicine in Finland

Juhana Hallikainen, M.D.
Medical Director, Peijas area EMS
Helsinki University Hospital
Hessen 13.11.2014
Background info on Finland

- Geography/Demographics/Economy
  - area 340,000 sq km
  - population 5.6 million
  - popul. density 17/km²
  - GNP 142 bill. €
    - 7.7% spent on healthcare
  - 350 largely independent municipalities
    - responsible for providing basic level health care
Background info on Finland

- Health system
  - 38 physicians/ 100 000 inhabitants

- Health indicators
  - birth rate 10.8 / 1000 inhabitants
  - death rate 9.4 / 1000
  - Infant mortality 3.2 / 1000 live births
  - Life expectancy at birth 75.0 M / 81.8 F
University- and central hospitals
Hospitals (at the moment)

- 5 university hospitals
- 16 central hospitals (for instance no neurosurgery, etc.)
- 40 local hospitals (number will be reduced in near future)
- self-admittance, referral or by ambulance
Dispatching

- EMS accessed via national emergency phone number “112”
  - EMS, police, fire and rescue dispatch
  - EMS provides basic life support, advanced life support by paramedics, and advanced life support by physicians (ground and HEMS)

- 5 dispatch centers to cover the whole country
EMS providers training

- Fireman: 22 weeks during their basic training + basic health care training at nursing college
- EMT: 1.5 years training
- Paramedics: 4 years training
EMS has a national three tier system

- (First responder)
- Basic Life Support
- Advanced Life Support
- Pre-hospital physician (5 HEMS units and 2 ground units)
Three ways to provide EMS care

- Hospital district’s own ambulances & personnel
- Joint venture with the areal fire & rescue service (most of the bigger cities)
- Private entrepreneur
Law concerning EMS care/availability

- 5 risk categories
  - Tasks, threats
- 4 urgency categories
- In comparable areas inside hospital district
  - Equal quality of EMS-service
  - Equal reaching time
### Areal risk & urgency categories

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<th>Risk category</th>
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Medical risk assessment
EMS in rural areas, Lapland hospital district as an example
Lapland vs Austria

Lapland hospital district
- 86 114km²
- 14. biggest `country`
- 117000 inhabitants
  - 1,36 /km²
- 1 angiolab

Austria
- 83 871km²
- 8 217 280 inhabitants
  - 98/km²
- 37 angiolabs
• Distances from Rovaniemi direct/road
  – Nuorgam 409km/496km
  – Enontekiö 228km/317km
  – Oulu 166km/224km
• Average speed 100km/h
  – Lapland central hospital- Oulu university hospital 2h
• FinnHEMS51 speed 275km/h
  – Lapland central hospital- Oulu university hospital 37min
• First response
  • Voluntary firefighters
  • Police
  • Border guard
Cross-border cooperation

- Treaty concerning cross-border cooperation in emergency care 22 Sept 2011