

Tandem pattern of Patent Cycle Ambulance.

Nordic Collaboration on EMS data collection, quality indicators and benchmarking

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Nordic collaboration



Finland

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Sweden

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Department of knowledge based policy and guidance



Iceland

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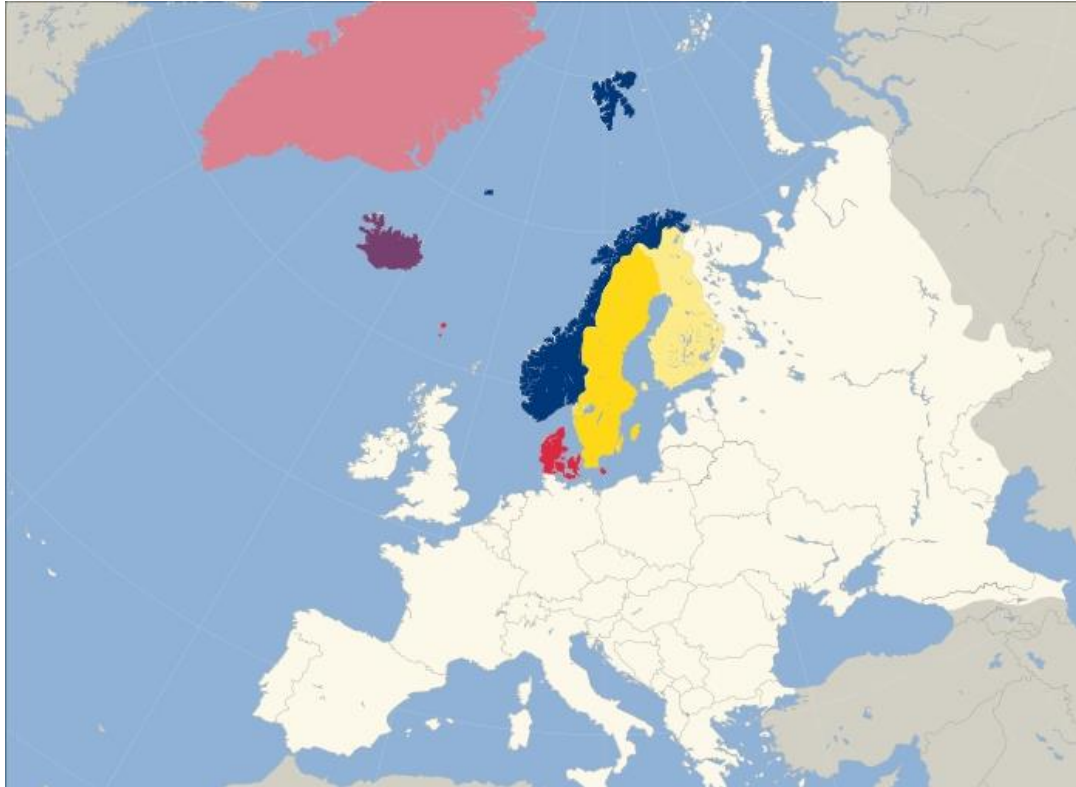


Norway

Olsen Steinar

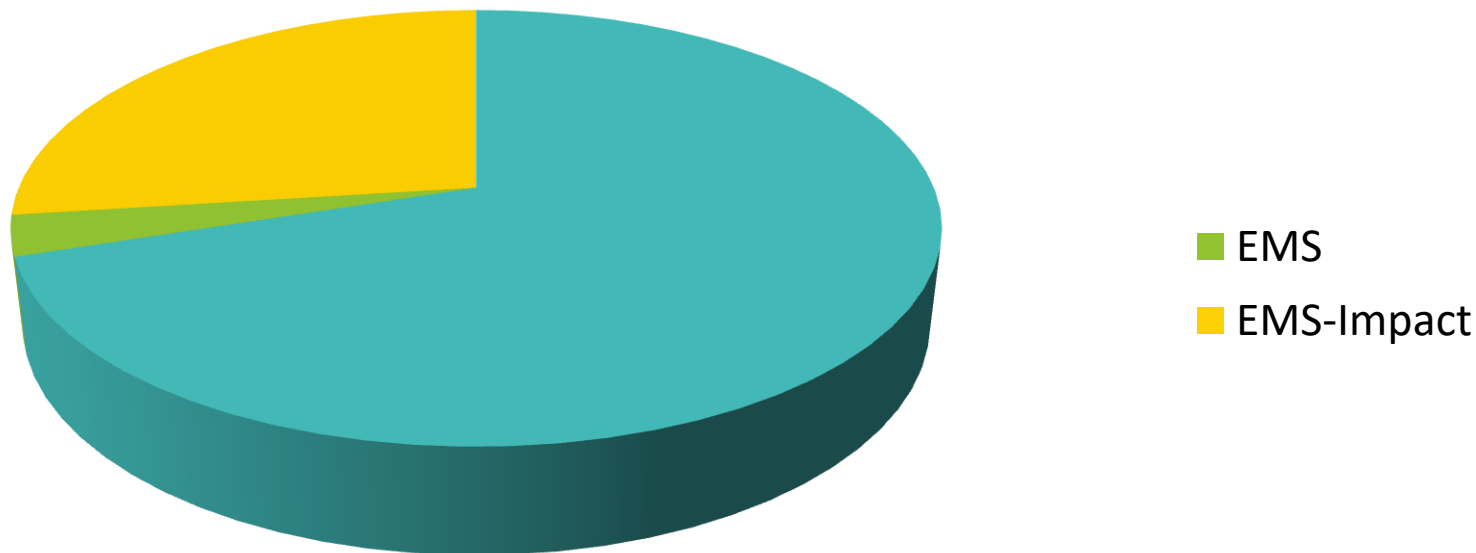
The Norwegian Directorate of Health, Project Manager

5 countries - 27 mill. inhabitants



EMS – A key player in tomorrow's health care

Healthcare expenditure



EMS – The black box in health care

- Response time
 - Limited relation to outcome
- Limited patient-centered measures
- Limited outcome data
- Limited research and scientific work



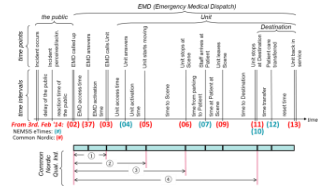
The need for system insight



Project plan

2015

Timeline



2016

- Key statistics
- Process Indicators
- Quality Performance Indicators

2017

- Key statistics
- Process Indicators
- Quality Performance Indicators

2018

- Key statistics
- Process Indicators
- Quality Performance Indicators

Defining

Defining

Piloting

Benchmarking

Activities

- Definitions
- Data collection
- Testing

Activities

- Definitions
- Data collection
- Testing
- Validation

Activities

- Piloting
- Validation

Activities

- Final report
- Web publications
- Future management

Nordic Emergency Medical Services project on data collection and benchmarking 2014 - 2018 - recommendations

Achievements:

- Nordic EMS patient pathway has been defined and described.
 - Data structure is developed.
 - Terms and definitions needed for the quality indicators are defined.
 - First set of Nordic quality indicators was agreed and results are presented in the report.

Nordic time point's and QI's - Compliant with the US based NEMESIS code set

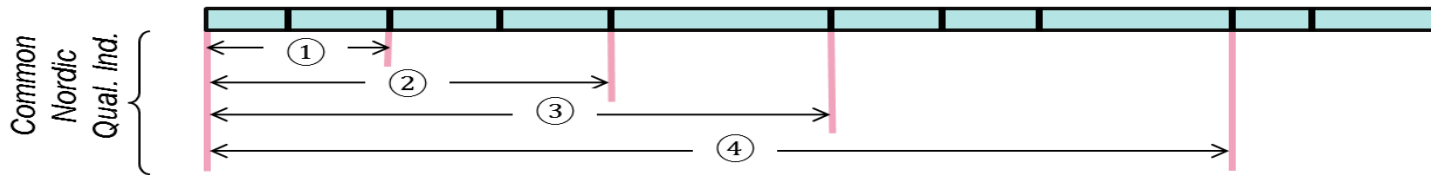
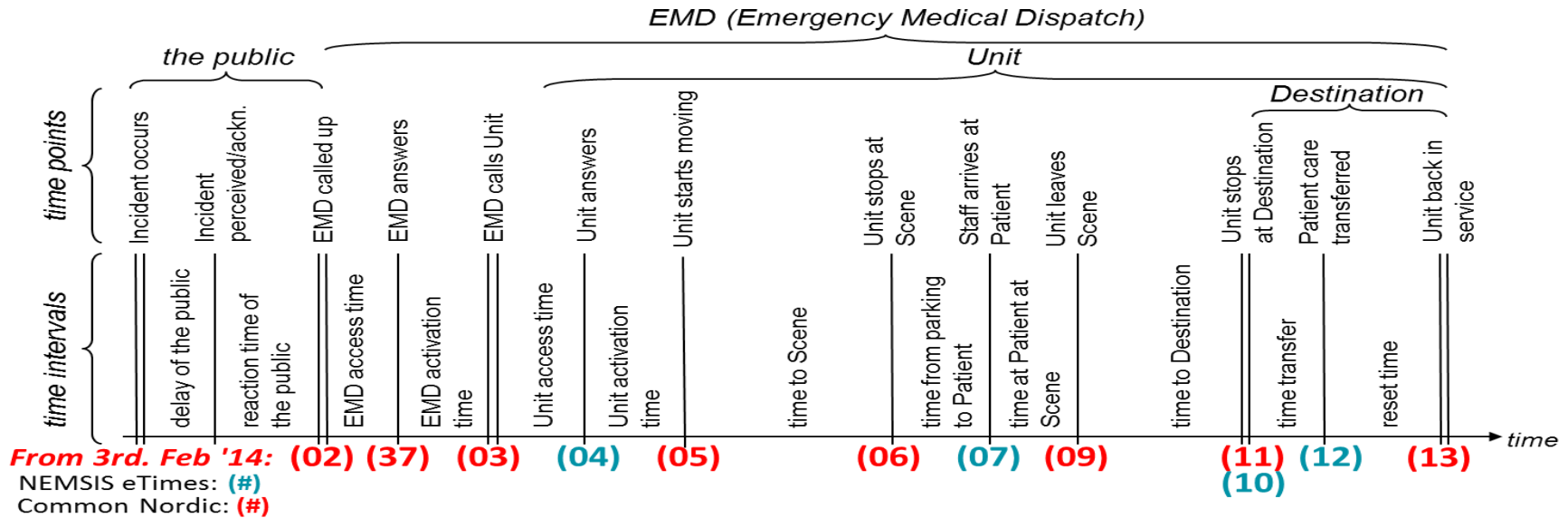


Figure 3.3: Data structure for patient pathways in EMS

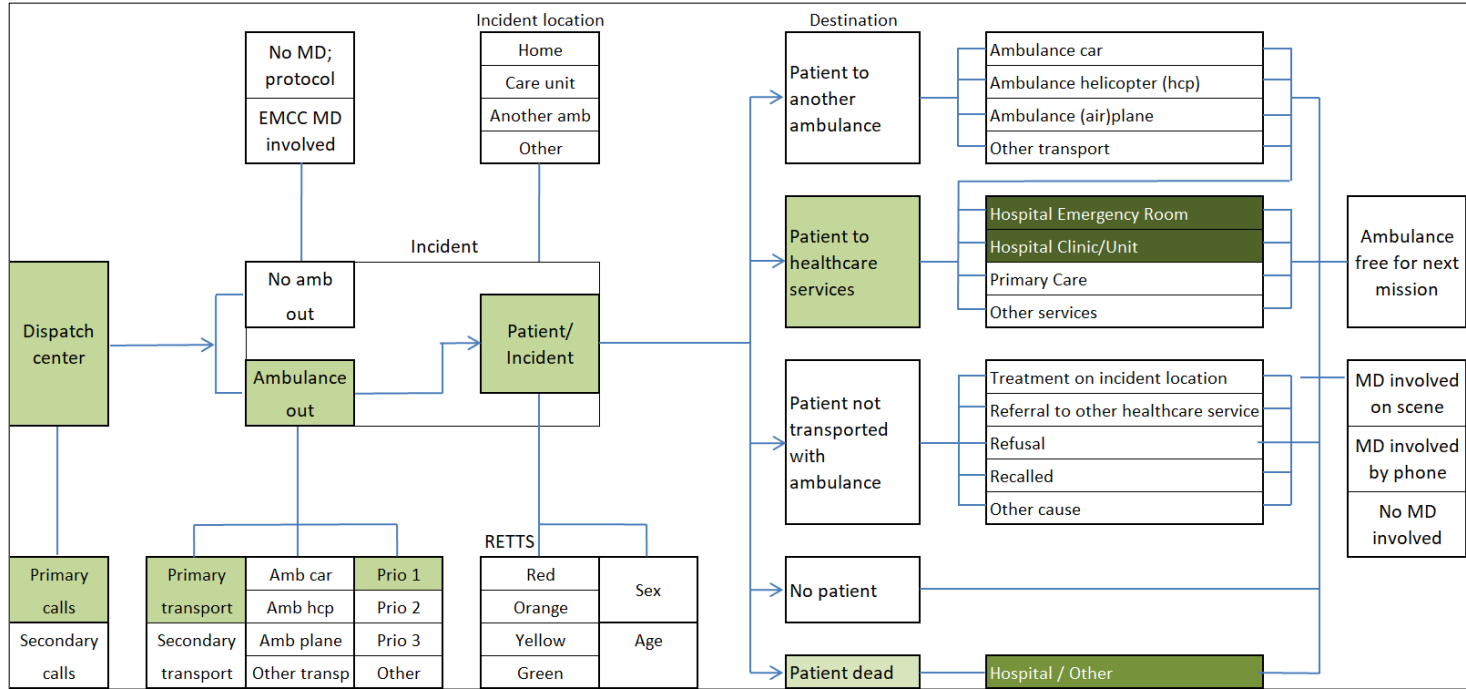


Figure 4.7: EMS response time

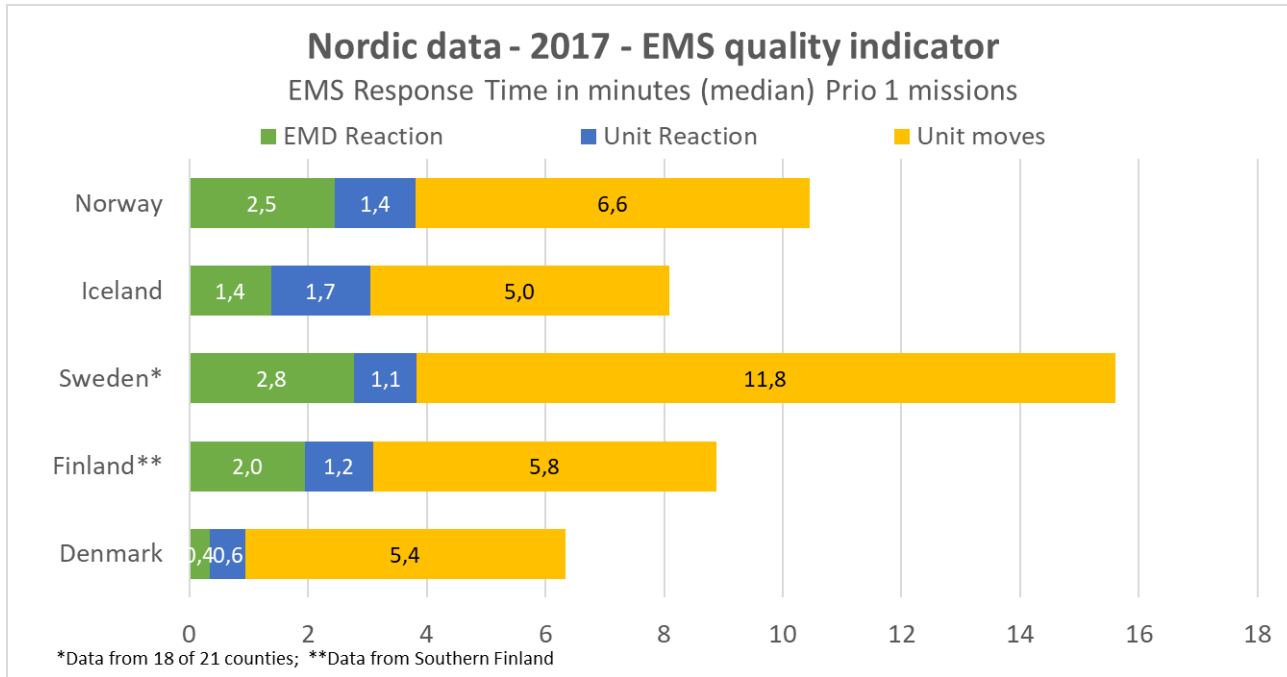


Figure 4.3: Number of acute missions per 1000 inhabit

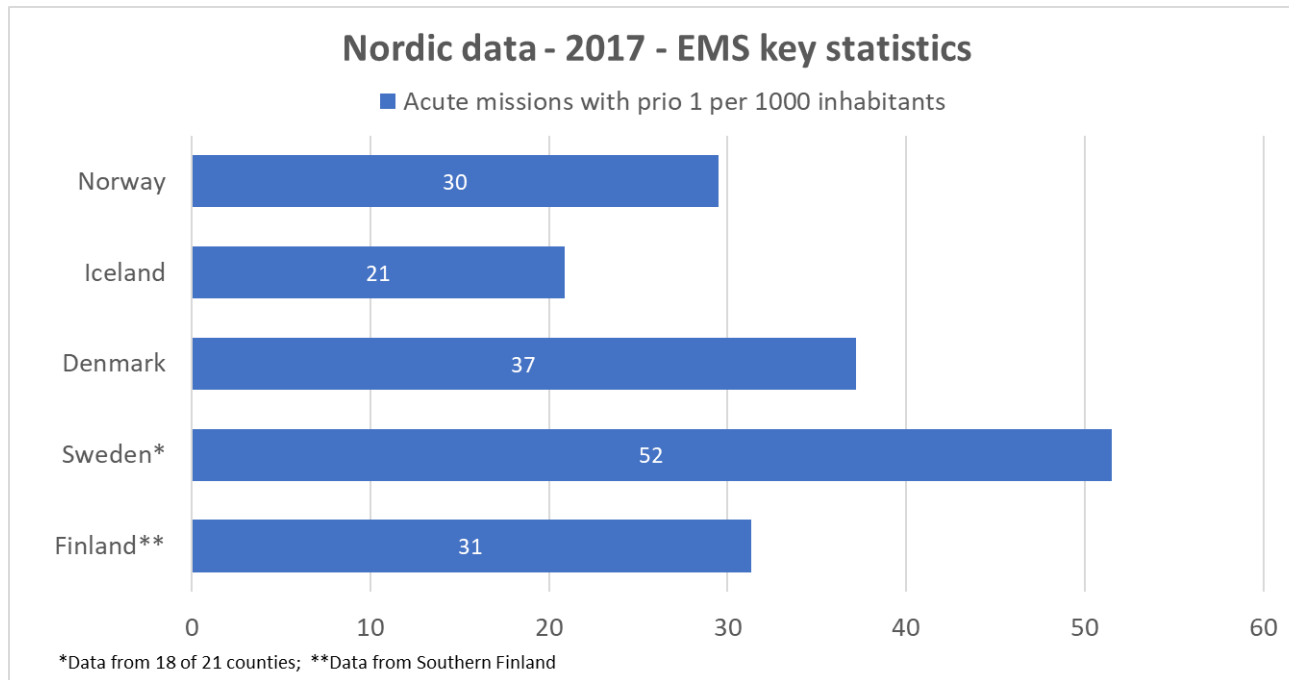
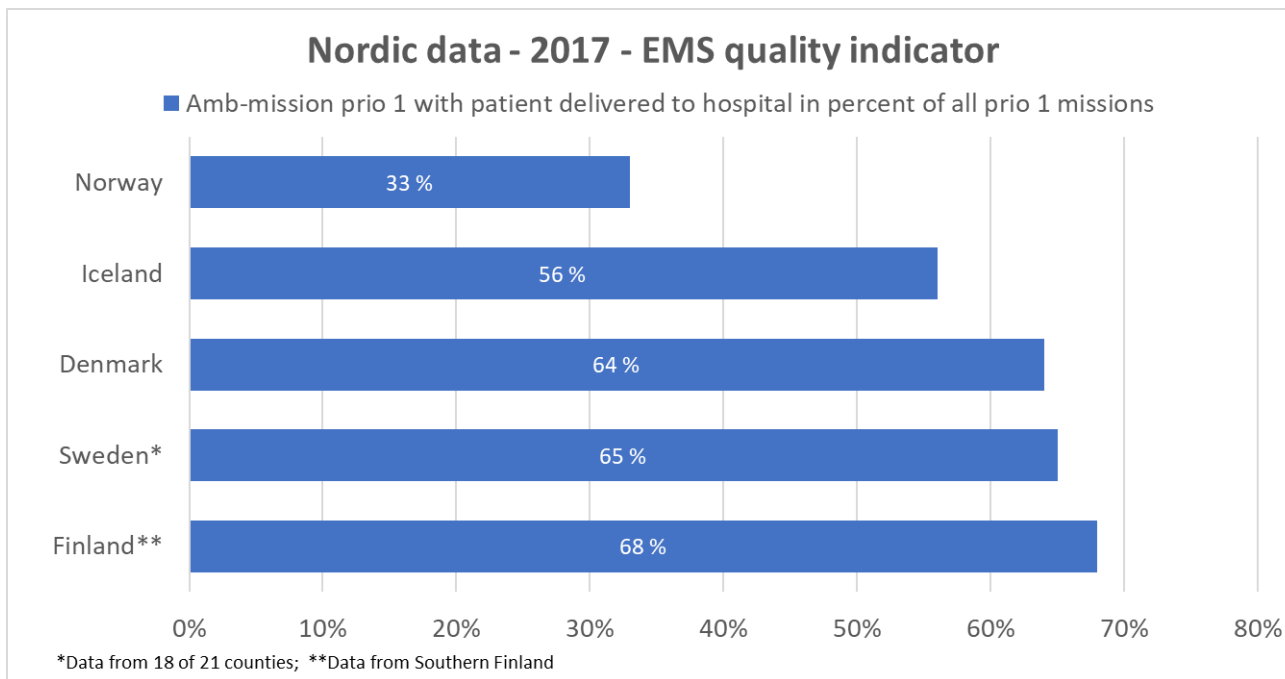


Figure 4.6: Percentage of ambulance missions with patients delivered to hospital



Recomndations for the future:

- The Nordic project group suggests including EMS as a **new area of statistics in the Nordic Ministry Council**.
- **Continued formalized Nordic collaboration** on quality and patient issues for EMS patients is needed
- To be able to collect and compare valid patient data, national **electronic patient records and registries** in the EMS should be implemented.
- Developing common **Nordic criterion and definitions** of urgencies and priorities for the same type of incidents to be implemented in the emergency medical dispatch centers.
- **A Nordic manual for using a subset of ICPC 2 classification for EMS is needed and should be implemented.**



ICPC-2 in Nordic EMS

Alaotsikko. Taustakuvan voit vaihtaa klikkaamalla hiiren kakkospainiketta -> Muotoile tausta -kohdasta

Reason for care in emergency medical services

- Reason for care during EMS phase of acute care is internationally not well described nor coded in a systematic or consequent manner.
- In Nordic countries there either does not exist any such coding system or it is merely based on dispatch coding.
- After initial assessment and treatment, EMS providers should be able to formulate a “main reason for care”. This describes mainly patient related signs and symptoms and in some incidents mainly the mechanisms causing the mission.



Reason for care in emergency medical services

- During a Nordic Collaboration meeting in November 2017 in Aalborg a WG was pointed out to hold a consensus meeting for the use of ICPC-2 in all Nordic countries as a "reason for care" in EMS.
- The WG meeting took place in Helsinki February 2018 and agreed upon a «favorite» list from the original ICPC-2 for EMS.
 - < 100 codes
- Common basis in English and translated to each Nordic language for national purposes

Example of ICPC-2 definition in EMS

A.1 Symptoms and complaints

A01 Pain general/multiple sites

Suomeksi: Kipu, yleinen

Short title: Pain general/multiple sites

Short EMS title: Pain, general

EMS interpretation: Unspecified general pain

Inclusion: chronic general pain; multiple aches

Lyhyt EMS otsikko suomeksi: Kipu, yleinen

EMS tulkinta suomeksi: Määrittämätön yleinen kipu

ICD10: R52.0; R52.1; R52.2; R52.9

ICPC-2 in EMS and ER in Finland

- ICPC-2 planned to be used in the future in nationwide EMS-ePCR
- During the formulation of a Finnish dataset for nationwide EMS-ePCR, ICPC-2 was applied to describe “main reason for care”
- The original list of ICPC-2 will be implemented in ePCR, but a “favorite” list is primarily given in software (< 100 codes)
- Starting in production in 2019-2020 (first in some of the 20 hospital districts)
- ICPC-2 is also planned to be used in national hospital ER network and national medical help line for citizens (tel 116 117)
- → possible to analyse the chain of treatment

The use and future work of ICPC-2 in Nordic context

- WG group members contact their national ICPC-2 «network» for information and future work.
- Favourite list for EMS is annually evaluated and defined
- A «master file» and «manual» will be formulated in English and after that each Nordic country will translate them to its national language.
- ICPC-2 can in some cases be defined only after all information needed is available to the care provider.
- In some cases, two ICPC-2 codes are needed to more accurately describe main reason for care (eg. cardiac arrest and suspected pulmonary embolism).
- Original ICPC-2 definitions are followed but for EMS use these can be further specified.
- Code K98 will be suggested to define «cardiac arrest with attempted resuscitation».
- Code A88 is planned to divide into four (4) individual codes to specify physical factors causing an adverse event. These should be separated from each other via software solutions.

Further collaboration

- We hope to collaborate with WONCA / WICC to enlarge ICPC-2 use also for prehospital EMS, multinationally
- Thank you

PROJECT ON DATACOLLECTION AND BENCHMARKING 2014 - 2018

Nordic Emergency Medical Services