

The New National Trauma system in Norway – A Model for for Other Scandinavian Countries?

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Traumemesystem i Norge

Forslag til organisering av
behandlingen av alvorlig
skadde pasienter

Innstilling fra arbeidsgruppe
nedsatt av de regionale
helseforetakene.
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The initiative

- By the Medical Associations
 - Norwegian Surgical Association
 - Norwegian Association of Anaesthetists
- Communication with Ministry of Health

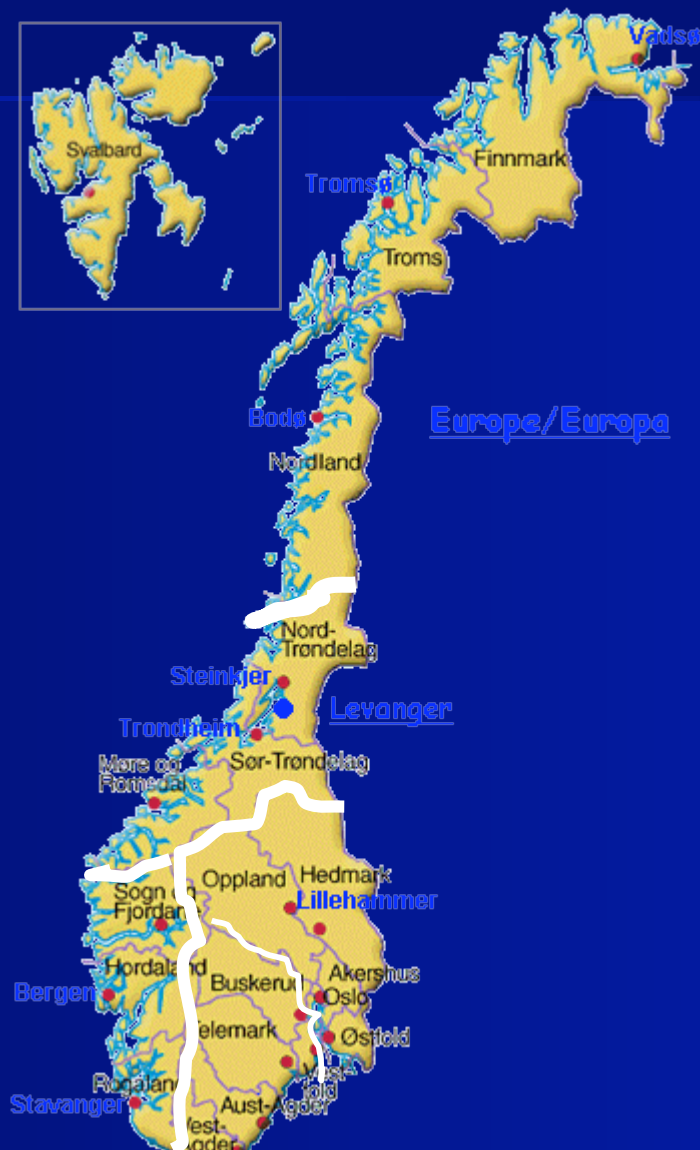
Terms of reference

- Given by the Health Authorities
- Describe trauma health care today
- State the need for and describe a Norwegian national trauma system
 - Structure
 - Minimum standards
 - Describe injuries that should be centralized

Members of the working group

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Background – What's wrong today – The new trauma system



Trauma treatment organisation in Norway

- No knowledge on;
 - Number of trauma victims
 - Quality of treatment
 - Quality differences between hospitals
 - Mortality
 - Where is the chain of care weakest?

Standards

- No national standards
 - Prehospital
 - In-hospital
 - Rehab services

Air ambulans services

- Good coverage, but....
 - "Cannot fly"
 - Weather conditions
- No formal requirements to the medical personell

Ambulance services

- The only resource in bad weather
- Great differences in transport times
 - 45 minutes - 6 hours in the most rural areas
 - Unqualified
 - Only 40 % of paramedics with formal education
 - Worst in rural areas

General practitioner

- The only medical resource for car/boat ambulance, but..
 - Takes part to a little extent
 - Minor experience
 - Huge districts
 - No minimum standards

Hospital trauma services

- 83 % have trauma team
- 79 % have procedures for trauma admittance, trauma committee at 63 %, but...
 - No minimum standards for competence
 - 3 hospitals demand ATLS for trauma team leader
 - 2 hospitals demand documented competence in emergency procedures

The new System of Trauma Care

Structure

- Four levels
 - Prehospital services
 - Acute hospitals
 - Trauma centre
 - Rehabilitation hospital services

Prehospital services

- Standards for ordering air ambulance
- Standards for competence/courses for all kind of ambulance personell

Prehospital services

- Standards for transfers
 - The local hospital has the responsibility to secure adequate competence
- GP shall have skills to perform lifesaving procedures and be the leader of the ambulance team

Acute hospitals

- Trauma team is a requirement
- Activation of ER, operating services within 15 minutes
- Establish criteria for patient transfer
- Updated procedures

Acute hospitals

- Surgeon on call shall have the skills to do emergency procedures
 - Extraperitoneal packing, abdominal packing, repair heart injuries, stop bleeding in thorax
- Continual on call service
- Team members shall have trauma courses
- Team training (Best)
- Quality systems (trauma audit, registry)

Trauma centres

- Obligated to receive patients from the acute hospitals
- Same standards for acute surgery as for acute hospitals
- Competence for definitive treatment of all injuries, except for injuries to be centralized

Rehabilitation

- Axis between the trauma and rehab centre
- Complex infrequent injuries shall be centralized
- Localized close to the trauma centre
- Those repairing the injuries shall participate in the rehab team

Trauma registry

- All hospitals shall give data to the national registry
- Obtain prehospital data

- National competens centre
 - Input from the system and the registry
 - Improve quality
 - Make standards
 - Research

- Centralization of particular injuries
 - Maxillo-fascial
 - Extremity injuries with major soft injuries
 - Complex joint injuries
 - Brachial plexus injuries

Conclusion

