

# Trauma Education the PHTLS Way - Scandinavian Consensus Possible?

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# A Medical Managers Reflections

- How to transform Novices to Proficients (Experts)
- How to enhance this progressive process through critical thinking
  - Links gained through experience may not be accurate
  - Without correct links, faulty conclusions may be reached
- How to sustain cognitive knowledge and skills

# The Novice

- No experience
- Knows the rules of the game...could probably recite signs and symptoms of various disorders...
- But may not recognize until after the call is over
- Unable to differentiate between relevant and irrelevant information
- With guidance: LEARNS from the experience

# Proficient

- Perceives the whole
- Situations viewed through perspectives of past situations
  - Much on the unconscious level
- Operating in a familiar territory - more intuitive
- Starts to revise actions based on experience
  - Reflects in action

# Expert

- Pattern recognition
  - Most processing is on the unconscious level
- Inductive
- Sometimes act on “feelings”
- Action before thinking
- Able to operate when forced into unfamiliar territory
- Reflection in & on action (runs critique)

# Pediatric Rural Trauma

- *”the overwhelming cause of preventable deaths and inappropriate care was related to a lack of recognition and ability to treat straightforward problems with airways, breathing and circulation”*
- *”... less commonly attributed to the lack of immediate availability of sophisticated personell or institutional resources ...”*

Analysis of Preventable Pediatric Trauma Deaths and Inappropriate Care in Montana  
Esposito et al. Journal of Trauma 1999;47

# PHTLS program

- *”... improved cognitive and trauma management skills performance among prehospital paramedical personnel who complete the basic PHTLS program”*
- *Tested by MCQs and simulated trauma patient performances*

Effect of basic prehospital trauma life support program on cognitive and trauma management skills.  
Ali et al. World Journal of Surgery 1998; 22.

# Prehospital Trauma Life Support

*National Association of EMTs (NAEMT)*

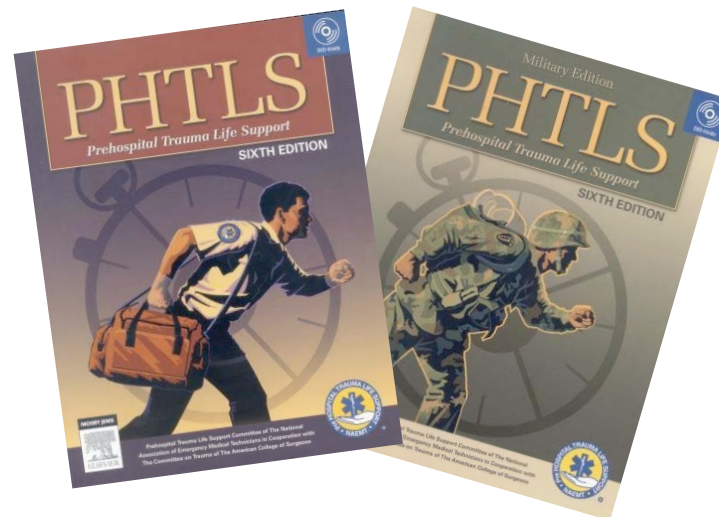
*In cooperation with  
The Committee on Trauma,  
American College of Surgeons  
(COT-ACS)*

NAEMT

MOSBY



- Revision of instructor manual, lectures and textbook every 4.th year
  - 6th edition 2006
- Textbook, slides and test had to be translated into norwegian
- Illustrations, scenarios and recommendations have been adapted to national standards



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# PHTLS Facts



- Closely associated with the Advanced Trauma Life Support (ATLS) program
- In Norway established in advance of ATLS since 2000
- Program funded by the Norwegian Air Ambulance Foundation
- By now more than 4.000 prehospital providers have completed the advanced course
- Recognized as a part of prehospital treatment guidelines for trauma

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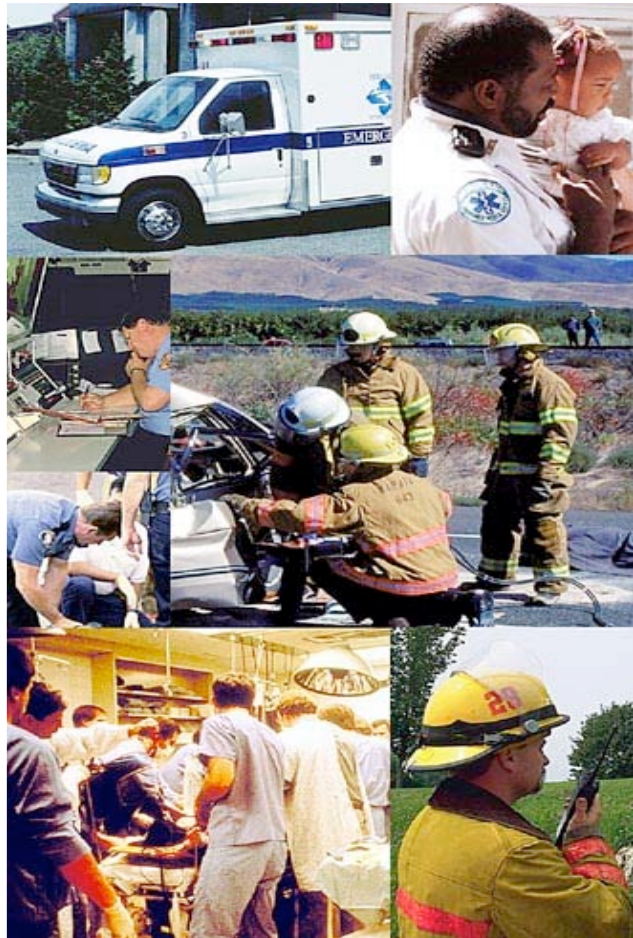




## PHTLS Facts (cont'd)

- PHTLS emphasizes development of critical thinking;
  - Short lectures
  - Discussion of case scenarios
  - Practical training w/ moulage scenarios
  - Combines with rapid extrication techniques
- Refresher program will be offered as a web-supported course (2008)

# Elements in Quality Improvement



- **Structure**

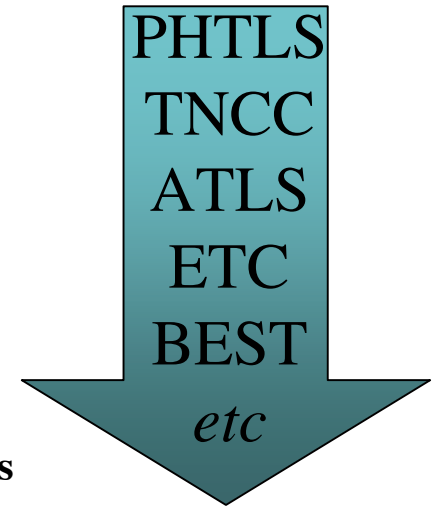
**Resources**  
**Qualifications**  
**Guidelines**

- **Process**

**Assessment**  
**Performance**  
**Group dynamics and teambuilding**

- **Results**

**Outcome measures**



Source: Donabedian. Qual Rev Bull 1992

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# Positive Value of LS-programs

- Useful elements in a process aiming for;
  - Improved Knowledge
  - Systematic Assessment
  - Enhanced Proficiency
  - Ability to reproduce in stressful situations
  - Standardization of Care
- Important "evolutionary step" in the process of system-learning and QI

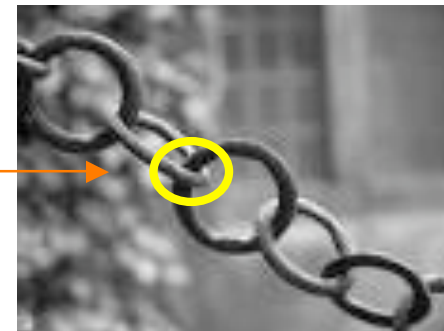
# Cautions

- Not the final solution to QI or better outcome
- Have to be put into a wider context
  - To transform better individual performances into better teamwork
  - ... and outcome
  - Dependent on a system for clinical governance
- Reflects current knowledge (?)
  - Local / national adjustment (?)
- Have to be retrained
- Need for outcome studies

# Consensus ?



- Courses are tools not the goal
- Agree on role content and expectations for all practitioners
- Agree on treatment protocols
- Agree on curriculum
- Perform regular revisions
- Perform audit
- Develop cooperation-skills;
  - Target the "hand-over" situations
- Stress importance of team approach
- Emphasize practical training
- Establish system to enable reflection on action – peer review among the Scandinavians?

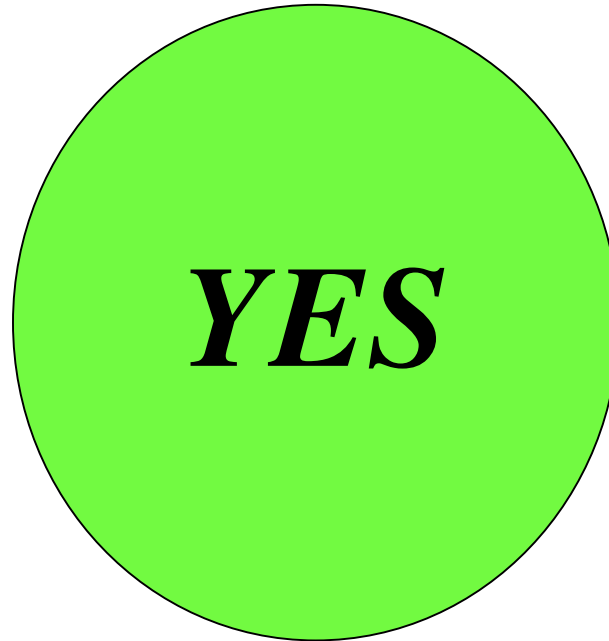


# Consensus ? (cont'd)

- No need to urge for new programs
- Establish inter-faculty cooperation
- Adapt to Scandinavian standards and trauma demographics
- Establish program for continuing education

- Reason to believe that US based programs are invalid in Europe?





*...Scandinavian Consensus on Trauma Education possible?*

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