

# The Educational Curriculum for RRS

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# Danish Institute for Medical Simulation

## The main center for simulation in the Capital Region Of Denmark



## Conflicts of interest: None to declare



## Content:

- Why do we train the teams? – the needs
- Diverse teams – diverse training
- Simulation based training – what can it offer?
- Evaluation and feedback – possibilities after the introduction of a regional Database

# What are the tasks we need to prepare the teams for?

- Working in a different environment
- Creating a team amongst strangers
- Having a structured approach to the patient
- Using appropriate medical knowledge
- Helping and educating staff on the wards
- Taking decisions, sometimes life and death – even end – of - life decisions
- Making a plan – and getting it across
- Follow-up?

## Very diverse rapid response teams

- Nurse from ICU – “hotline” to an ICU doctor
- Nurse and doctor from ICU
- Anesthesia nurse
  
- Sometimes defined together with ward nurse and doctor
  
- Some hospitals don’t have a RRT – call the ICU physician directly (anesthesiologist)

## Diverse teams- diverse training???

Possible subjects of interest:

- Scoring system – or calling criteria
- A systematic approach to examine the patient
- Specific treatment/care knowledge
- Situational awareness
- Decision making
- Team function – leadership and followership
- Communication
- Handover

## Diverse teams-

Need training on different levels, but also team training





## Diverse teams- diverse training

- From no training to 8 hours and training together with ward staff for the deteriorating patient
- Supervision and feedback for the nurses
- Feedback in cases of cardiac arrest (doctors only)
- 2-3 annual theme sessions, brush up and improvement discussions
- Bed-site training and supervision (nurses mostly)

# Diverse teams- diverse training

## Nurse-led teams:

- ABCDE approach to patients
- Communication - SBAR
- Documentation
- Peer- to peer supervision

## Doctor-led teams:

- Nurses more training than doctors in ABCDE
- Communication - SBAR
- Documentation
- Simulation and debriefing

## What is not trained?

- Decision making – biases
- Who benefits from ICU?
- Sequelae after ICU stay
- End – of – life decision making and conversations

## Various kinds of bias

- Anchoring og Confirmation bias – see only what we want to see
- Attribution error – The patient is to "blame" (alcohol, obesity etc)
- Availability error – seen many times before
- Triage Cueing – tentative diagnoses, "Geography is destiny"
- Representativeness restraint – avoids thinking about alternative, rare manifestations
- Search satisfying – stops when one possible answer is found
- Outcome bias –likes diagnoses with a beneficial outcome
- Aggregate bias – I don'r need to follow guidelines, my patients /situations are different
- Etc.....

Ref: "How doctors think", Jerome Groopman, M.D. 2008

Ref: Pat Croskerry: The Importance of Cognitive Errors in Diagnosis and Strategies to Minimize Them". Acad Med 2003;78: 775-780

## Situational awareness

- Not realizing – or wanting to realize – the seriousness of the situation
- Perceptual error

Failure to perceive clinical events: an under-recognised source of error

Author: Paul R. Greig Helen Higham Anna C. Nobre

DOI: <http://dx.doi.org/doi:10.1016/j.resuscitation.2014.03.316>

Resuscitation 2014

## Hierarchy

Speak up for the patient – just do it !

- Very easy to say (and mean in earnest) – but veeery difficult to do
- What does it take to minimize hierarchy in patient safety sensitive situations?
- A change in culture – how?
- Training - together - simulation

## An example of a curriculum

Program in Herlev University Hospital  
For the ICU staff:

- Intro – the goal of RRT and the tasks
- ABCDE – a workshop
- Respect and feedback – a workshop on communication
- Documentation – our new database
- Simulation – scenarios and debriefings

## An example of a curriculum

Program in Herlev University Hospital

For the ward staff:

- Intro – the goal of EWS and the MET
- EWS and ABCDE – theory and a workshop
- Simulation – scenarios and debriefings
  
- **BUT THEY DO NOT TRAIN TOGETHER !!!**



## Full scale simulation

Training a realistic scenario (patient case) in realistic settings with no real patient involved

The scenario is followed by a debriefing of the participants



## Simulation offers:

- Drills, know your role and your tasks
- An opportunity to reflect on own behaviour
- Training non-technical skills (safe communication, situation awareness, leadership, co-operation, task management, use of relevant resources etc.)



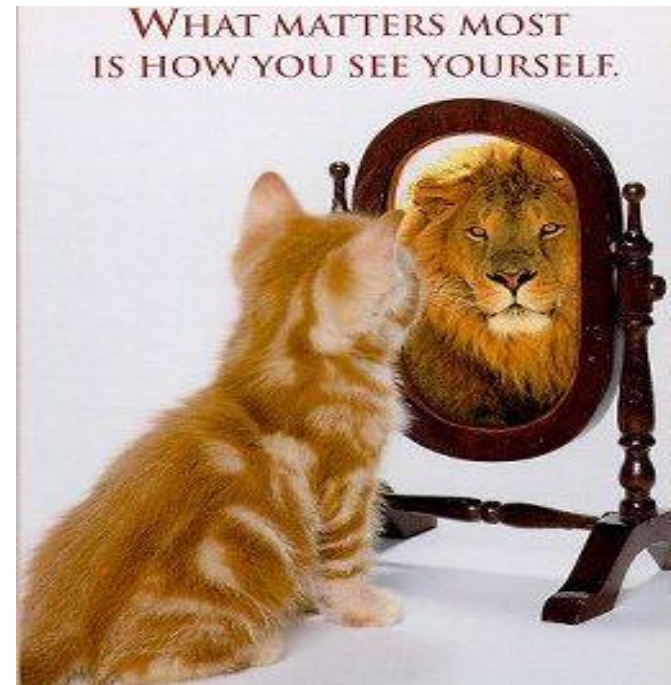
## Simulation offers:

- Safe surroundings – no patient is harmed
- Medical knowledge and Non-technical skills are trained
- Scenarios that can be customized to the actual participants



# Reflection

- Enable the learners to identify and build on their existing knowledge
- Enable the learners to identify deficits in their knowledge
- Enable the learners to generalize from a particular experience and apply their new knowledge
- Learners are likely to feel more ownership of insights that emerge from their own discoveries



## Simulation based education-concrete experiences

Citations from ViEWS education 2012, post simulation scenario:

- Nurse Jane: "Now I see that it gives me a tool and language in common with the doctors – the doctor will be more willing to see the patient"
- Doctor Katja: " Improved common language, no longer the vague: I think Jensen is in a bad shape....  
But rather: "Jensen has a ViEWS score of 6 compared to this morning's 2, he is doing worse in RF and oxygen saturation and I even increased the O2 supply. I need you to come straight away, please".  
This will make me much more inclined to go there."

## Transfer into practice

A qualitative study of nursing students of transfer to practice:

1. Memory (enhancing storage and retrieval of knowledge)
2. Mnemonics as transfer tools
3. Recognizing similar situations
4. Emotional responses

Lessons learned: use simulated patients and increase stress

Ref: Sok Ying Liaw et al: Recognizing, responding and reporting patient deterioration: Transferring simulation learning to patient care settings. Resuscitation 83 (2012) 395-398

# Medical emergency teams

- Simulation enhances team-performance in a simulated environment

DeVita MA et al 2005 in Qual Saf Health Care



## NTS in Pediatric emergency teams

- In-situ training of technical as well as non-technical skills in a pediatric intensive care unit increased comfort and preparedness and decreased anxiety in a "real" multidisciplinary team

Ref: Allan C.K. et al in The Journal of Thoracic and Cardiovascular Surgery, 2010, 646-652



## What should be done more:

- Training the team together
- Training human factors (Elaine Bromiley video)
- Prevention/mitigating human error

<https://app.box.com/s/5ri1gm5cpcpm1wdl2cek>

[Youtube.com Just a Routine Operation](#)

## DATA drives knowledge

A database offers new possibilities:

- Use it for feedback to the nurses and doctors – who are especially interested when statistics is involved
- Several RRT calls before ICU admission
- Time lag
- Calls without a plan
- Is the entire team assembled (doctors on wards may be missing)
- Use it for the administration – number of calls – time used - resources

Thank You