



# TEACHER'S MANUAL

Course:  
Medical Communication Onboard and  
Ship to Shore

# Medical Communication onboard and ship to shore 3 ECTS (81 h) teacher's manual

The purpose of the teacher's manual is to assist teachers in organizing and introducing training courses. It is not the intention of teacher's manual to provide teachers with a rigid teaching package which they are expected to "follow blindly", because national educational systems, groups size and the cultural backgrounds of trainees in maritime subjects vary considerably from country to country. The teacher can choose suitable parts for target group and can even make changes that is needed to achieve the learning outcomes.

The teacher's manual has been designed to give ideas how to you use material developed in the OnBoard Med -project. Teacher's manuals content is: objectives, content, target group and student's amount, implementation and learning methods, assessment, learning process (summary) and tips for the teacher.

## Objectives: Student

- understand telemedicine systems on board and roles of personnel in emergency situations.
- consultation for the crew members on board, and consultation of the doctor outside of ship.
- can communicate effectively and correctly by using communication protocols / guidelines.
- know how to choose right kind of communication equipment
- can use different kind of communication methods (spoken and written) and equipment
- the use of the authorities network in communications and the information and reporting practices ensuring continuity of patient care

## Target group and student amount:

- Mariners, nurses and students for those fields.
- Online learning no limitation, practical exercise max 15 person exception big virtual simulation

## Content:

- the regulations which are guiding the preparations for exceptional conditions
- responsibility and actions in dangerous and hazardous situations
- the safe communication in case of emergency on board ship, ship to ship and ship to shore
- know how to use communication systems on ship
- know enough medical English and medical terminology for basic communication
- demonstrate their competence in communication in simulated situation
- Closed loop communication and situational awareness
- know basic in the history taking and patient counselling

## Implementation and learning methods:

- Individual, pair and group exercises
- Lectures (online and face to face)
- Workshops
- Skill labs and simulations

## Assessment:

- study diary (fail, 1-5)
- written paper (group work) (fail, 1-5)
- online discussions (pass / fail)
- skill lab and simulations (fail / pass)

### Learning methods

**eLearning** is learning utilizing electronic technologies to access educational material outside a traditional classroom. eLearning can be f. ex. online videos, lectures, discussions, teacher consultation, e-testing.

**Exercise** is an activity carried out for a specific purpose in online or face to face and can be individual or group exercise. F. ex. pre tasks, classroom exercise, model answer questions.

**Lecture:** an educational and theoretical talk to the students, which should be interactive. When the instructor incorporates engagement triggers and breaks the lecture at least once per class to have students participate in an activity that lets them work. The engagement triggers capture and maintain student attention and allow students to apply what they have learned or give them a context for upcoming lecture material. Lecture can be online, video lecture or face to face.

**Skill lab** provide students with an opportunity to learn and develop the skills essential to nursing / maritime practice within a supportive and safe environment.

**Simulation** is a form of experiential learning. Where teacher sets problems, events or scenario that can be used for training students, how to behave in authentic situation within a supportive and safe environment. It includes introduction, simulation and debriefing.

**Workshop** is a period of practical work on a particular subject in which a small group of people shares their knowledge or experience. Workshop can also be like learning café where you develop new ideas or approaches to specific subject.

## SUMMARY

From this summary, you as a teacher can easily choose by the learning subjects and material you want to use with you students (depends on the target group and the group size). E.g. if you have nursing students they have already knowledge about medical documentation, however you will need that material with mariners and other way around with e.g. the communication on board. And also depending on the time that you can use in the subject, there is lectures, exercises to do in the classroom with bigger group.

CONTENT	TIME	LEARNING METHODS and MATERIAL	ASSESSMENT
“Broken phone”-game and closed loop communication – motivation to the communication	2 h	group exercise lead by teacher and group discussion	learning diary
Medical Communication administrative partners and used devices	6 h	self-study written paper - drawing	peer assessment done / refill Learning diary
Medical English	2-10 h	Optima test – individual exercise (make as many times you like) Medical English dictionary	points from Optima
Good Medical communication and ISBAR	2-4 h	online lecture internet test	self-evaluation learning diary
Patient interview (history taking)	2 -4 h	pp-presentation pair exercise (teacher’s tips)	learning diary
Medical documentation	4-6 h	pp-self-study and pre-exercise online workshop patient scenario - exercise (teacher’s tips)	learning diary
Patient counseling	2-4 h	pp- presentation and exercise	learning diary
Ethical challenges in verbal and written communication.	2-4h	online discussion (read the articles first)	fail / pass learning diary
Medical communication exercise (primary evaluation, patient interview, secondary evaluation)	1-2 h	pair exercise (one is the patient and one is the interview and then change the roles) (teacher’s tips)	peer assessment fail / pass learning diary
Situational awareness and time-out	2 h	pp- self-study and pre-exercise online	fail / pass learning diary
Team communication	2-3 h	pp- self-study or teacher’s lecture	learning diary
Leader communication	2 h	pp- self-study or teacher’s lecture	learning diary
Team communication exercise	4-6 h	Patient simulation (choose the difficulties after student's knowledge and skills): care in team, team communication, closed-loop communication, leader communication and situational awareness	fail / pass learning diary
Medical communication simulation in authentic kind of situation in multi professional group.	8-12 h	Big virtual simulation (one plan done)	fail / re-done / pass learning diary



## **TIPS FOR THE TEACHER**

### **Lectures (presentation):**

- Team communication
- Medical\_communication\_ISBAR
- Medical\_Communication\_documentation
- Medical\_recording\_form\_mariners
- Triage
- History taking
- Patient counseling

### **Learning diary for student**

What is a learning diary? It is a tool for student's reflection. It helps student to assess what she / he knows already and has learned on the course. A learning diary is written during the entire course. The aim of the learning diary is to summarise, analyse and comment on the learning subject. You should create your own learning objectives and then reflect have you achieved them and how well. So you should not write what teacher said, you should write about the subject on your own words and your learning process.

There are many different styles to write learning diary: either as a diary where every lecture is addressed in turn or in the form of an essay. Choose your own style.

The writer's voice is the most important but one's own opinions and experiences are not enough as arguments. The concepts and frameworks delivered during the classes should be covered.

You can use next questions to guide your writing and answer those in your diary: What did I learn? What is still unclear to me? Are there unfamiliar concepts? How is what I have now learned linked to what I have learned before? What kind of feelings has the course evoked? What am I reflecting on and what does the knowledge I have acquired mean to me? How is what I learned related to me as a person, as a member of society or as an expert in my field?

### **Exercises:**

#### **How you make students interested in communication and medical communication.**

This exercise can be used in both students and refreshers, both maritime and nursing. Student will learn valuable lesson about communication and problems in communication, and refreshers can be challenged to give patient report and use closed loop communication already in first round. After exercise, you will have good discussion with students and hear stories of what had happened.

#### **\*Group Exercise in classroom (ca. 30- 45 min)**

##### **- instruction to teacher 1**

**The purpose of this exercise is to see the effects of our communication, and what will happened when communication breaks down.**

**“This is Fun and it does not take that long time!”**

- This exercise is like the broken phone, which you might have played.

- We will have two rounds. In the first round, the communication will be very basic and in the second round we will use a communication technique.
- Teacher will debrief after each round to help us learn from what occurred.
- ***Read these instructions aloud:***
  - In groups of 7-9 (depends of the amount of students)
  - First person reads message quietly to the next person in line/ round
  - That person whispers what they heard to the next person line, and so on
  - The last person shares aloud what they heard with the group
  - The first person reads the original message aloud
- ***Read rules for Round 1:***
  - Whoever is speaking delivers the message only once and cannot repeat the message
  - No one can ask questions
  - Do not write anything down
- *Let groups perform the exercise. Remind them to share the final message within their group.*

**“This is Mrs. Lindblom, born March 12, 1956. She fell down the stairs and hurt her right hip and right wrist. She is in pain and panic. She wants you to call her husband.” or you can make your own report.**

#### **Debrief:**

- How did that go?
- How was your memory during that exercise?
- Have you seen this happen in the real life? If yes, what was the result?
- Then you can let student to listen the online lecture about **communication and ISBAR (approx. 20 min) or you can go that trough with them.** To activate student during the lecture you can ask them to ask some questions like:
  - Am I a good listener? Do I use closed loop communication in everyday work? What kind of language is used? Difficult words?
- ***Read rules for Round 2:***
  - Each person who hears the message repeats back what they heard
  - They may also ask one clarifying question
  - The speaker can repeat the message or give clarification
  - Perform this repeat-back and clarification only once
- *Let groups perform the exercise. Remind them to share the final message within their group. Round 2 will take longer to complete.*

**“She is Mrs. Lindblom. She was moved to nurses cabin with the stretcher. Her legs are in different length and hand is swollen. She is in pain, NRS 8. She is going to be evacuated with the helicopter in a hour. “Or you can make your own report.**

**Debrief:**

- How did that go?
- How was your memory during that exercise?
- Have you seen this happen in the real life? If yes, what was the result?

**EXTRA ROUND:**

A lot of different kind of things affects to the communication like noise, language, professional language, culture differences, stress, work load, technical matters,

You can continue even future with this exercise. In the third round you can include the different kind of distractions like noise, questions,

**Read rules for Round 3:**

- Each person who hears the message repeats back what they heard
  - They may also ask one clarifying question
  - The speaker can repeat the message or give clarification
  - Perform this repeat-back and clarification only once
- 
- *Let groups perform the exercise. Remind them to share the final message within their group. Round 3 will take as long as the second round.*

**“She is Mrs. Lindblom born March 12, 1956. She fell down the stairs and looks like that she has fracture in her right hip and some injure in her right wrist. Fractures are supported. Her vital signs ok. She got 4 mg Oxynorm iv. on one hour ago and it helped for the pain (NRS 2).”**

### **Medical communication partners (administrative)**

Communication happens in occupational safety or in case of emergency. Who you are communicating with and with what device? Draw a communication chart. Student draws the communication chart in case of medical emergency on board and which device you use while communicating. Other one can be done in occupational safety situation.

### **Online discussion:**

Get familiar with different kind of communication devices used on board. Which you use and when and why. Read the articles and discuss in group online. End of the communication.

Articles needed

### **Medical communication both verbal and written**

Medical communication is all the communication concerning the patient's medical history, condition, examination and care. Medical communication can be verbal and written one. Both of those are under confidentiality. You should always ask patient how are allowed to know their things. Patient may not want that their relative or friends gets to know their medical condition. The captain is always responsible for medical care and final decisions regarding health of seafarers. Full responsibility for the diagnosis and prescription of treatments belongs to the doctor on board or to the TMAS physician. The physician on the ship or at TMAS should protect the privacy of patients.

**Listen online lecture about verbal communication in Optima and get familiar with documentation form and lecture in Optima**



**\*Virtual Communication simulation (easy)**

The Aim is that marines learn to interview the patient (get the background and symptoms that patient has now) and then make the consultation call with Zello to the nurse with using ISBAR. Before simulation, students get familiar with the learning material in Optima (Optima-> medical communication).

These patient scenarios are for the students who acts as the patients (NOT to the helpers). One mariner acts as patient and the other one as medical officer. Patient act like patient and lists the symptoms and details only if mariner ask or takes measurements.

TUAS emergency nurse students answer to the call with Zello and give short feedback after phone call. Before consultation call the mariner collect all necessary information for the call (patient interview and patient examination), so the consultation will go smoothly.

Instruction to the medical officer:

Patient interview:

- what had happened / What is wrong / presenting medical problem
- Name, age, sex

Patient examination:

- Look: what do you see
- Listen: what do you hear
- Touch: what do you feel
- Measurement: Pulse, Blood pressure, Respiratory rate, SaO2 (oxygen saturation), Temperature, Pain (NRS in scale 0-10)

Consultation call – check do you have all information needed before call!!

<b>I = identify</b>	<b>Identify yourself</b> <b>Identify ship and location</b> <b>Identify patient</b>
<b>S = Situation</b>	<b>State purpose</b> <b>The reason I am calling in....</b>
<b>B = Background</b>	<b>Tell the story</b> <b>Current problem of the patient</b>
<b>A = Assessment</b>	<b>State what you think is going on</b>
<b>R = Request</b>	<b>State request</b>

**and then answer the questions and repeat the orders (closed loop- communication)**

**Documentation during simulation:**

Name:

Age:

Time and date

Vital signs:

RR \_\_\_\_\_ BP \_\_\_\_\_ P \_\_\_\_\_

TEMP \_\_\_\_\_ GCS \_\_\_\_\_ NRS \_\_\_\_\_

Presenting medical problem:

Background medical problems, medication and allergies:

Treatment given:

Tele Medical advice received:

Current given care:

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**Patient scenarios (these should give only to the patient):**

Patient act as authentic as possible all symptom described below.

Do not give any information if not ask or measured.

**Patient 1.**

Patient is mariner (age, gender as student acting as a patient), fell down the stair and hurt the right leg.

Symptoms and problems, patient acts and describes:

- Sitting on the ground. Conscious, distressed, pain in right leg (ankle)
- no outside bleeding or wound on site
- ankle is in wrong position and start to get bigger, swollen -> hematoma
- cannot step on the foot
- Pulse in the leg (ankle) feels weak and color of the skin is turning light blue
- Radial Pulse +, heart rate 99 / min
- pain level is 6 (scale 1-10)
- patient looks pale and sweaty (- > shock)

**Patient 2.**

Vessels pilot, a 45-year-old man who, suffered a severe angina attack. .

Symptoms and problems, patient acts and describes:

- Sitting on the ground. Conscious, distressed, severe left side chest pain (pressure and radiates to the arm).
  - Pain started about 30 min ago
  - I haven't have anything like that before and I am healthy
  - Can get up, but in motion the chest pain is too strong.
  - Pain level is 8 (scale 0-10)
  - Respiratory Rate 24 / min,
  - Radial pulse feels (+) and is fast
  - Blood pressure 189/67
- 

**Patient 3.**

The healthy cleaner female (30 year old) on the vessel.

Symptoms and problems, patient acts and describes:

- Shortness of breath, coughing or wheezing.
- Pressure on the chest
- A whistling or wheezing sound when exhaling
- trouble to speak and too tired to get up and walk
- Respiratory rate 28 min (breathing freq / min),
- Radial pulse + and fast (Heart rate 110),
- SaO2 (Saturation) 85%
- pain level 4 ( scale 0-10)

**Triage - test in Optima (lecture before that)**

### **\*Medical communication exercise**

Make pairs. One of the students / refreshers acts as a patient and the other one is the interviewer. You can give the roles to the pair, f. ex. mariner call to the captain or... At the same time you can practice how to use the device used on board. The most important part is how to act like patient, so do not tell what symptoms you have, act them (as long it is possible)!

Before you start the exercise you should know the triage. there is pp-presentation and online exercise in Optima about this subject. In this manual you will find the flowchart.

#### **Pair Activity: patient scenario (easy)**

##### **Patient scenario 1a for practice:**

The patient breathes an estimate of 18 minutes, breathing calmly. Radial pulse feels. Patient is in shock and repeats the same short phrase constantly. He sits hands in front of his face, and does not create eye contact with the helpers.

AND

##### **Patient scenario 1b for practice:**

Patients breathe in estimates of 22 / min. Radial pulse feels. The patient is lying on his back and initially does not react for wake ups. Soon the patient will wake up but cannot speak.

OR

##### **Patient scenario 2a for practice:**

The patient complains abdominal (stomach) pain and nausea (feel sick). Nausea has lasted for three days and has been vomiting this morning once. No fever.

AND

##### **Patient scenario 2b for practice:**

The patient has a headache third day and an ordinary analgesic (pain killer) does not help. No nausea or vomiting. There is no change in the field of vision (sees normally)

#### **\*Pair Activity: patient scenario (hard)**

Make pairs. One of the students / refreshers acts as a patient and the other one is the interviewer. Patient acts like patient (more realistic the better) and Interviewer practice interview, patient triage, examination and documentation and the end the ISBAR by consulting the doctor.

You can puzzle this exercise, as you like. You can to this exercise without documentation at first. And then do the documentation as a separate exercise. Students can use triage guide, primary and secondary evaluation guide in this exercise.

##### **Patient scenario 1 for practice:**

Patient gives the details only when asked or measured.

- *What had happened:* 42-year man (John Smith) in the bar on the ship after fight. Broken bottle had made deep wound in the right under arm.
- *What do you first (START):* Stop bleeding. After that you can continue primary triage and then you can continue the further assessment. Patient is awake but sleepy. Breathing is normal and normal frequency. No need the spinal immobilisation. Radials pulse is fast.
- *ALARM:* how does the protocol go? Where do you call? What device are you using? And why?
- *Assessment (ABCDE):* Patient saturation 96 %, breathing normal. Patient answers in low pace and tired to the asker questions. Breathing rate 24/min. Auscultation clear and symmetric. NIBP 120/82 mmHg, Heart rate 126/min. Skin is warm and dry. Under arm wound bleeds even if there is pressure bandage. Blood lost one litre. Fingers in both hands are quite cold. Patient tells that he feels dizzy. GCS 15. Pain in the arm and NRS 7 (pain scale). Blood sugar 4,4 mmol/l. Temperature (oto)36,0 °C. Alco 0,0 promil. Patient should be examined more to find out other problems. No other visible injuries or bleeding than in the arm.
- ISBAR Request:
- Patient hemodynamic (BP, P) is those bleeding quite stable. The compensation mechanisms cannot hold that stable much longer. Patient bleeding has to stop somehow and transported to the hospital as soon as possible.

#### Debrief:

- How did that go?
- How did you do interview go? How about Triage? How about ABCDE? What about those went good?
- What did you learn?

CHANGE THE ROLES !!

#### Patient scenario 2 for practice:

Patient gives the details only when asked or measured.

- *What had happened:* 24-years old male (David Moon). He is drunk and fell down stairs, about 10 stars. End of the stair he landed right foot ahead and felt down. Now sits there.
- *What do you first (START):* No heavy bleeding. No need to immobilize the spine. Airway is open and he is awake. He is clearly drunk but says hello to the helpers. Radialis pulse feels strong.
- *ALARM:* how does the protocol go? Where do you call? What device are you using? and why?
- *Assessment (ABCDE):* Patient SpO2 is 96 %, breathing is easy and he speaks long sentences. Breathing rate (BR) is 24/min. Breathing sounds are clear and symmetrical. Blood Pressure (BP) 138/91 mmHg, HR 110/min. His skin is warm, dry and healthy color. Right foot is swollen beneath the ankle, skin is healthy, but purple. Pulse in the leg is strong. Leg is very painful. He can barely move his toes. Patient tells that otherwise his ok. You can't see any other injuries. Patient has tried to stand up but could not do it. Pain is NRS 9. He is drunk,

but talks clearly. GCS 15. Blood sugar 7,8 mmol/l. Temperature (oto) 37,0 °C. Alco 1,2 promille.

- *ISBAR Request:* After interview, symptoms and injuries you can suspect fracture in the foot area. Patient is stable but he needs doctor for x-ray and fracture treatment.

#### Debrief:

- How did that go?
- How did you do interview go? How about Triage? How about ABCDE? What about those went good?
- What did you learn?

#### Ethical challengers at sea – online discussion in Optima

1) Read the articles: (Found in Optima)

Ricci et. all. 2017. Ethical challenges to medical assistance at sea. Marine policy. Volume 81, July 2017, Pages 247-249

AND

Ricci et all. 2014 Medical assistance at the sea: legal and medico-legal problems. International maritime health.

2) Group online-discussion: You can also bring your own experience to the discussion. Don't forget to justify your ideas and opinions.

#### \*History taking exercise in non-emergency situation

**One of the students acts like a patient and one as medical officer / Ship nurse taking history and documentation.**

##### **Patient 1**

A 50-year-old lady cook attends medical officer / Ship nurse's practice complaining of worsening tiredness.

**Recent complaint:** It all started about a couple of months ago when I was late to work after sleeping, despite having had an early night. Since then I have been feeling tired almost all the time, regardless of how much sleep I have. I'm struggling to make it through a full working day and shift work does not help the problem. Yesterday I fell asleep during my break and the my colleague thought that I need to get checked out, so that's why I'm here. Oh I have also not got much of an appetite.

**What should be asked from the patient?**

##### **Tiredness (sleeping)**

- How many hours is she sleeping a day?
- Does she wake frequently when sleeping?
- Did the tiredness come on suddenly or has it gradually gotten worse?
- Does she take any sleep medications or any medications with drowsiness as a side effect?



PATIENT ANSWER:

*I have been sleeping around 13-14 hours a day, which is a far more than the 7 hours I was sleeping a three months ago. It didn't suddenly switch to 14 hours though, it's has been increasing over the last month. I seem to sleep well.*

**Appetite (eating):**

- When did her appetite change?
- Is her appetite getting worse, better or remaining the same?
- How much is she managing to eat on an average day?
- Does she stop eating because she feels nauseated or just “full” (early satiety)
- Is she experiencing nausea or vomiting?
- What is her normal bowel habit? Has this changed? Bleeding?
- Has she lost any weight?
- Does she have any reflux symptoms or abdominal pain?

PATIENT ANSWER:

*“My appetite is generally pretty good, but for the last 3-4 weeks it's definitely decreased. I don't feel particularly nauseated (sick), I just seem to feel full fast. I might have a piece of toast and then feel like I don't need anything else for another 5-6 hours, it's really weird. I haven't had any vomiting either. My bowels are the same than always, and I go on once a day and it looks normal to me. My weight has decreased, I've started wearing a belt with my jeans as they were slipping down. I haven't had any abdominal (stomach) pain and no reflux type symptoms.”*

**General health:**

- Any recent illnesses?
- Any current infective symptoms – fever / cough / dysuria / diarrhoea
- Any contact with others who are unwell or have similar symptoms?
- Any significant psychological stress at present? Current mood?
- Menstrual history
- Diabetic symptoms
- Hypothyroid symptoms – cold intolerance / weight gain / memory impairment

PATIENT ANSWER: *“I've been well... I haven't had any coughs or burning when passing water. I have woken up feeling quite hot and sweaty on a few times. Nobody I've been in close contact with has been unwell from my knowledge. I'm feeling stressed about the sleeping at work, but my mood is generally good. I don't really have periods as I have. I haven't noticed that I'm particularly thirsty or passing more water than usual. Also haven't noticed any cold intolerance or memory problems.”*

**Past medical history / Drug history**

- Any known medical conditions?
- Any regular medication?
- Any over the counter medication (without prescription)?
- Any recreational drug use?

PATIENT ANSWER: *“I'm not taking any regular medication or anything other either. I don't take any drugs”*

**Social history / Family history**

- Current living situation
- Job details – *role / responsibilities*
- Smoking history
- Alcohol history
- Impact of symptoms on activities of daily living
- Family history of disease?

PATIENT ANSWER: *“I’ve never smoked and I only drink at weekends, maybe 6-8 units. There’s no illness that runs in my family as far as I’m aware.”*

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## Patient 2

A 36-year-old woman presents to the medical officer or ship nurse as she has been feeling unwell over the last few months and things appear to be getting worse.

**Recent complaint:** *“I’ve just not been feeling well, I feel terrible in fact. I’m losing weight (8 kg), my bowels have taken a turn for the worse and I’m struggling to sleep. I’m really worried, my heart is racing sometimes, I think something is seriously wrong.”*

### Weight loss:

- How much? Duration? How you know?
- Appetite? Diet?
- Change in level of exercise?

PATIENT ANSWER: *“I have lost about 8 kg over the last 8 months. My appetite has been fine, I’ve been eating more if anything! I love ice cream. I go to the gym at least twice a week and have done for many years, so no change there.”*

### Bowel habit:

- Diarrhoea vs constipation? Frequency of bowels opening? What is her normal bowel habit?
- Any blood in the stool? Any change in colour of the stool? (melaena / steatorrhoea)
- When did the bowel habit change?
- Are there any obvious triggers? Change in diet?
- Any abdominal pain? Where?

PATIENT ANSWER: *“I have ve got diarrhoea, I’m going about 3-4 times a day, normally I’d just go once in the morning. The diarrhoea started about 4 months ago and has been the same. There’s been no change in the colour and no blood. I haven’t managed to identify any obvious trigger, it’s just always happening, regardless of what I eat or do. I don’t have any abdominal pain or bloating.”*

### Sleeping (Tiredness):

- How many hours a night on average do you sleep?
- Do you have any ideas as to what’s causing your sleeping problems?

PATIENT ANSWER: *“I am sleeping okay, between 5-8 hour a day”*

### Heart racing (*palpitations*)

- How often does this occur? / When did it start?
- Does it occur at rest, or only during exertion?
- Any triggers?
- Do the palpitations feel regular or irregular?
- Any associated chest pain or shortness of breath?
- Any presyncope or syncope?

*“The heart racing scares me. I keep worrying I’m having a heart attack. It seems to come on suddenly. I don’t know any triggers. I don’t get any chest pain or shortness of breath, but I sometimes feels a bit dizzy. I haven’t ever lost consciousness though. It’s hard to say if it’s regular, I’m pretty sure it’s irregular..”*

### \*Situational awareness - exercise

Situational Awareness means how well you are aware of what is near you and what is going on around you. It also entails being able to rationally and quickly tell what things or parameter might pose a potential threat to the patient or yourself.

Improving one's situational awareness skills will improve the patient safety. Everyone can improve their on situational awareness by strengths the vision and audio skills (what is happening around you while you talk to the friend? Concentrate your surroundings and you will be better observer and listener). Ask yourself questions about what you see and hear. What happened around you? What kind of clothing your friend had or what type of coffee mug their hade in next table. What did you hear? Where there some kind of music? Did the patient monitor make an alarm? What kind of noise did patient make? Start with familiar things and move to the patient related ones.

#### **Exercise 1 (Easy to hard)**

Easiest one is to play children's game "What is missing". Put some things in to the table and someone is closing the eyes and you take something of the table. Do you know what is missing? Start with 10-15 object and then but more when it starts to work even 30 to 50 object.

#### **Exercise 2 (Medium)**

Give student a picture or show the video (it don't have to be about patient care, it can be something more familiar at the first). Then ask questions about it. Then student can look the video again. How many things went right?

#### **Exercise 3 (Easy to Hard)**

You can also play the act. Or there can also be some kind of patient simulation when students are ready for that (advanced) and practice situational awareness and time-out technique there.

Situational awareness is important in patient care. You may miss some information if you are not aware or you or patient will be in dangerous.

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### Course coworkers:

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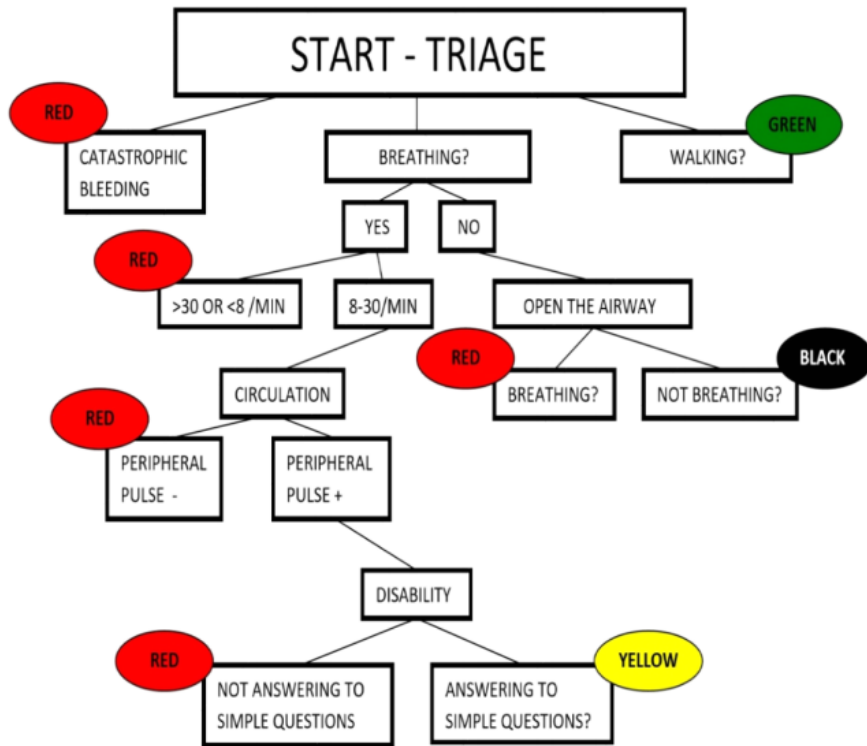
Portsmuth Raivo, Project Manager, Maritime Specialist, Estonian Nautical School

Silander Gunnar, Special Advisor, Consultant, Åland University of Applied Sciences

**References:**

**APP.**

**Use Triage, primary and secondary evaluation (Ojuva & Lindgren 2018)**



Ojuva & Lindgren 2017

Primary evaluation	
<b>C</b>	- Catastrophic bleeding → Stem the blood flow. - Pain on cervical spine? Injury mechanism? Patient's level of consciousness reduced? → Stabilize cervical spine.
<b>A</b>	- Check the patient's airway. Is the patient responding? - If the patient is unconscious → Open patient's airway (insert oropharyngeal airway if needed). Remove possible vomit and foreign bodies from pharynx. If <b>no airflow</b> → Start CPR.
<b>B</b>	- Is the patient responding: normally in sentences or in singular words? - Look for signs of cyanosis. - Respiratory rate approximately <b>&gt; 30 or &lt; 8</b> → Critical patient. - Use of the accessory muscles of respiration?
<b>C</b>	- Feel the peripheral pulse. <b>Lack of peripheral pulse</b> → Critical patient. - Inspect the patient's skin: warm, dry, sweating, cold?
<b>D</b>	- Is the patient: conscious, responding, having a seizure? - If the patient is not responding to voice, does he/she respond to pain? - If the patient is <b>unresponsive to pain</b> → Critical patient.

Secondary evaluation	
<b>A</b>	- Is the patient's airway still compromised? → Make sure the patient's airway stays open with available equipment (tracheal intubation, supraglottic airway).
<b>B</b>	- Measure patient's oxygen saturation and count the respiratory rate. - Listen to the patient's breath sounds. - Is the chest expansion equal on both sides? → Palpate the patient's chest.
<b>C</b>	- Measure the patient's blood pressure and pulse rate. - Inspect the patient's peripheries (skin color and temperature). - Assess the state of the external jugular veins.
<b>D</b>	- Count the patient's GCS score. Does the patient seem oriented or desoriented? Examine the pupils (size, reaction to light). - Check the functionality of the patient's arms and legs (sense of touch, weakness)
<b>E</b>	- Expose the patient's body as necessary to find all injuries. - Systematically check the patients whole body for signs of injury. - Measure the patient's blood glucose and temperature. - Minimise heat loss.



ISBAR		
<b>I</b> <b>Identify</b>	identify self; name position, location and who you are talking to  Identify patient: name, age, sex, location	
<b>S</b> <b>Situation</b>	State purpose  "The reason I am calling is...."	
		Eg. "This is urgent because the patient is bleeding and BP under 100 mmHg"
<b>B</b> <b>Background</b>	Tell the story Current problem of the patient	
	Relevant history, Relevant examination Relevant test result  Management	If urgent  Relevant vital signs current management
<b>A</b> <b>Assessment</b>	State what you think is going on	
	E.g. patient has fever and I can not find the infection	Urgent: Patient is hypovolemic and GCS is getting down
<b>R</b> <b>Request</b>	State request	
	E.g. you opinion about the test we should run	Urgent We need help urgently



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