





















HASIČI Město JAVORNÍK



Mediální partneři:



HvězdaŽivota.cz



16. ročník dětské záchranářské soutěže HELPÍKŮV POHÁR 16<sup>th</sup> Year of the Childern´s Rescue Competition HELPIK´S CUP

8. ročník soutěže operátorů ZOS ZLATÉ SLUCHÁTKO 8<sup>th</sup> Year of the EMS Dispatchers Competition GOLDEN HEADSET

4. ročník soutěže studentů lékařských fakult MUC. RR 4<sup>th</sup> Year of the Medical Students Competition MUC. RR



Čelovka	Den	MUC. RR NAT-RLP NAT-RZP	Rozhodčí:	Andrea Smolková, Dana Nosovská Radka Fousková, Michaela Hartošová Lenka Šrahulková, Dana Nosovská	RALLYE REJVÍZ 2014
Headlamp	Day	INT-PHYS	Judges:	Andrea Smolková, Adéla Hažmuková	
Time limit for task:		INT-PARA max. 12 mins			Story get to team with instructions.

# Story for team:

Emergency Dispatch Centre received emergency call and send you to: A man called to dispatch centre and told that his wife collapsed in the bathroom and now is not communicating.

# Your tasks:

Assess scene and correct work management on site.

- Examine and treat the patient.
- Define working diagnosis and differential diagnosis, administer the therapy.
- Define direction according to local situation and possible following steps.
- If hospitalization is needed, define mean of transport.

# Conditions on the scene:

May 23, 2014, 10:30pm, clear sky, calm, temperature 15°C (59°F). Call to address time is 5 mins. All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCHER.

# Místní situace:

- The closest hospital is 10 km ground transport. Equipment: surgery, internal medicine, pediatrics, an anesthesiology and intensive care, biochemical laboratory. Α
- The higher type hospital is 20 km ground transport. Equipment like A and, in addition, Gynecology and Obstetrics, CT, ORL, Psychiatry, Oncology, Emergency department and в Department of infectious disease.
- Specialized centre 55 km ground transport. Equipment like B and, in addition Traumacentre, Department for the treatment of burns, Cardiology and magnetic resonance imaging С unit
- D Leave the patient on the place.

#### Mean of transport: Information Е Helicopter rescue Arrival 15 mins. after request through Emergency Dispatch Center. Landing on the scene is possible. Ground By your ambulance. F Ground - next ambulance with paramedic crew Arrival 15 mins. after request through Emergency Dispatch Center. G H Ground - next ambulance with physician crew Arrival 15 mins. after request through Emergency Dispatch Center. Another Describe and justify to judge.

Report to judge (example): "Direction A, transport F" and any additional information at their discretion.

# Situation on the scene:

Upon arriving at the place, the crew goes to the apartment, where there is complete darkness. Husband has a small flashlight and explains that a while ago he heard loud blow and in the entire apartment supply electrical power dropped out. The patient's husband did the crew into the bathroom. There the patient (about a 25 year old woman) is situated in the bath, is hanged over the edge. The bath is empty, dry, and the woman is lying face down, unconscious and not breathing. The old hair dryer (turned off) is hanging from the wall on the electric cord. The targeted questions husband answers, that the woman was drying hair in the bathroom and then he heard a strong blow, after which the electricity was dropped out. A electricity cannot be restored and the crew has the only light source - own headlamps. The husband will not lend you his headlamp, nor can help you. He is looking after a sleeping child (will not work in the role, the only mention of it). Husband answers targeted questions, that a woman is healthy, not suffering from anything, no operation, no medication in history, has a two year old daughter, the last meal before the 3 hours, no alcohol, no food allergy. After removing her from the bath and initial examinations is to find the following: the unconscious GCS 3 (1-1-1), not breathing, pulseless, inicial recorded rhythm on ECG is

ventricular fibrillation. After 5 minutes of CPR in terms of ERC guidelines (2010) is the ROSC. In the second examination then crew will find excoriation on the forehead and burn injury on palm of the right hand. The crew makes all the activities in the dark, you may use your own headlamps.

# Key words:

Cardiac arrest, ventricular fibrillation, CPR, ROSC, electrical shock/accident, burn.

	Team scoring	1	2	3	4	5	Max. points 1 300	Correct decisions and performance
1	Orientation at the scene	Searching of electricity breakdown cause	Searching of patient's unconsciousnes s and electricity breakdown connection/relat ionship	Light source/headlam p supplying			120	<ol> <li>Finding from the husband, that in the flat is electricity dropping out.</li> <li>Finding that the patient was drying her hair, when the loud blow was heard. Since then,she is unconscious.</li> <li>Own headlamps or any other light source.</li> <li>Will be evaluated all or nothing</li> </ol>
		30	30	60				
2	Patient examination, history and correct treatment	Consciousness, pulse, breathing, initial ECG rythm 4x10	Cervical spine fixation during evacuation	History (past morbidity, recent medical conditions, alergy, last meal and alcohol) 5x10	Finding and treatment excoriation on the forehead	Finding and treatment of burn injury on the right hand palm	180	<ol> <li>Finding the unconscious GCS 3, not breathing, pulseless, ventricular fibrillation.</li> <li>The head and neck fixation by both hands of one crew member.</li> <li>To each question oriented asking, evaluated individually.</li> <li>Solution of the evaluated 50% finding and 50% treatment</li> </ol>
		40	40	50	30	20		
3	The crew cooperation and the action quality	Clear and obvious crew leader	Crew (Balanced points distribution among the other members, except the leader) 2 memb: 30+30 3 memb: 20+20+20 1 memb: 60	The early beginning and the proper working of the CPR + proper drug administration (amiodaron + adrenalin/epine phrin) 30+30+15+15	Working with headlamps	Overview of devices and drugs	250	<ol> <li>In the team is the clear leader, who controls the action, issuing a loud, clear and meaningful instructions, shall be addressed to the members of the crew, summarizes the information obtained and proposed course of action.</li> <li>Each member is evaluated separately. We consider the participation of team work, cooperation with leader, the steps rationality.</li> <li>Start CPR immediately after the patient evacuation and finding cardiac arrest. The correct sequence of steps and medications.</li> <li>Hembers of the crew do not dazzle each other.</li> <li>The crew has an overview of medical equipment, each member has an overview of utility using by him, (without the liing around the ampoules and syringes). Nobody steps on anything but empty packagings (except glass ampules).</li> <li>Graded evaluating</li> </ol>
		60	60	90	20	20		
4	The quality of CPR	Appropriate speed (%) 100% = 140	Appropriate deep (%) 100% = 140	Appropriate hand position (%) 100% = 140	CPR performed at least 5 minutes (ROSC)		560	After 5 minutes (minimum 5 mins) of high- quality and effective CPR - ROSC. 1-3) Graded evaluating 4) All or nothing
		140	140	140	140			
5	Diagnosis, direction	Electric shock/ injury	Cardiac arrest, VF and CPR	Possible the head and neck injury	Burn after electric shock	A via F - PHYS A via F or H - PARA	190	1-5) All or nothing
L		50	50	30	30	30		

Knoflíkáři	Den	MUC. RR NAT-RLP	Rozhodčí:	Martin Šrahulek, Vladimír Husárek Martin Šrahulek Mistic I luc (sel	RALLYE REJVÍZ 2014
Buttoners	Day	NAT-RZP INT-PHYS INT-PARA	Judges:	Vladimír Husárek Pavel Tobiáš, Denisa Förtö	
Time limit for task:		max. 15 mins			Story get to team with instructions.
Story for team:					
Emergency Dispatch Center	er received emer	gency call and se	nd you to:		

Your tasks:

Assess scene and correct work management on site.

- Examine and treat the patient(s).
- If hospitalization is needed, prepare for transport.

# Conditions on the scene:

May 23, 2014, 10:30am, clear sky, calm, temperature 22°C (72°F). Call to address time is 15 mins.

All requests and information towards Emergency Dispatch Center should be directed to judge marked as DISPATCHER.

Castle gardener felt from the ladder on the tree from height around 3 m. Unable to move. Boat rental available.

# Local situation:

- A Nearest hospital: 20 km by ground transport. Depts: surgery, internal medicine (neurologists on duty nonstop), Anaesthesia and General Intensive Care, gynecology and obstetric, CT, biochemistry.
- B Higher level hospital: 42 km by ground transport. Depts: as A + ED, ENT, oncology, psychiatry, infectious diseases and pediatric dept.
- C Specialized centre: 55 km by ground transport. Depts: as B + traumacentre, burn unit, cardiocentre, stroke unit, NMR.
- D Leave the patient on the place.

Mean of transport:	Information
E Helicopter rescue	Arrival 15 mins. after request through Emergency Dispatch Center. Landing on the scene is possible.
F Ground	Team own ambulance.
G Ground - next ambulance with paramedic crew	Arrival 15 mins. after request through Emergency Dispatch Center.
H Ground - next ambulance with physician crew	Arrival 15 mins. after request through Emergency Dispatch Center.

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mergency ugn Describe and justify to judge.

Another

Report to judge (example): "Direction A, transport F" and any additional information at their discretion.

# Situation on the scene:

Gardener felt from the ladder on the tree from 3 m height on the island in the middle of castle pond. Lye on the ground, conscious, cry. Dg.: fracture of the left second thigh (calf). Crew leave equipment on the bank of the pond. All necesary equipment is at the patient site. Crew have to approach patient by boat, examine patient by ABCDE and prepare him to transport with proper immobilization technique. After preparation to transport crew come back. Time limit is from leaving the beach to report "prepared to transport".

### Key words:

Immobilisation devices and transportation techniques and correct use of its.

	Team scoring	1	2	3	4	5	Max. points 950	Correct decisions and performance
1	Transport to patient	Boat/1st team member	Boat/2nd team member	Boat/3th team member	Boat/4th team member		120	3 members crew = 40 points/member. 4 members crew = 30 points/member. Swimming is not suitable, problem with equipment taking. Boat is available.
		60/40/30	60/40/30	40/30	30			
2	ABCD	A	В	С	D		60	Primary survey according ATLS.
		15	15	15	15			
3	Cervical collar	Head fixation	Right size check	Correct placement	Firm position and check of placement		100	Cervical collar according guidelines.
		25	25	25	25			
4	Pelvic sling	Dg.: knee pressure (25) or open book (10)	Pocket check - emptying	Positioning of pelvic sling over trochanters	Optimal power of fixation		100	Extra points for new pelvic examination by knee pressure. AT pelvic fracture is knee pressure against fist impossible. It is more tenderness than pelvic pressure. Použití pánevního pásu dle platných quidelines.
		25	25	25	25			5
5	Vacuum splint on lower extremity	Preparation	Extremity with slight flexion at knee	Get under and positioning	Suction and fixation		100	Dg.: second thigh (calf) fracture. Vacuum splint according guidelines.
		25	25	25	25			
6	Scoop	Size evaluation	Placement with minimal move by pts	Handblock on the scoop during transfer	Removing to vacuum mattress		100	Scoop use according guidelines.
		25	25	25	25			
7	Vacuum mattress, heat loss prevention	Preparation	Placement	Modelling around head of the pts	Suction and fixation	Termofolie: use (25), covering around (50)	170	Vacuum mattress use according guidelines. Correct application of alufoil (plastic foil)
		20	25	25	25	75		
8	Teamwork, co-operation within team	Evident team leader	Crew communicate as team and members pass informations to leader	Leader accept and react to informations from members	Guided and regulated manipulation with pts	Communication between crew and patient (cope with distractors from surroundings, optimal information to pts)	100	Teamwork evident, teamleader visible with clear commands. Clear and mutual communication within team without repeating questions to pts and judge. Introduce themselves to patient at arrival, information about what we are doing and whyduring examination, clothes off etc. Crew on command of leader, adequate leadership, optimal communication with patient.
$\vdash$		20	20	20	20	20		
9	Actors (simulated patients, patient relatives, witnesses, bystandors ato)						100	Subjective evaluation by actors according actor's rules.
	bystanders etc.)	100						

Kuchař		MUC. RR	Rozhodčí:	Daniel Kvapil, Tomáš Hlaváček	RALLYE REJVÍZ 2014
	Noc	NAT-RLP		Daniel Kvapil, Radka Abrahámková	
		NAT-RZP		Kateřina Zvonařová, Ivo Trháč	
Cook	Night	INT-PHYS	Judges:	Patric Lausch, Marek Przybylak, Marios Sfakinakis	
		INT-PARA		Radek Janoch, Tomáš Hlaváček	
Time limit for task:		max. 10 mins			Story get to team with instructions.

# Story for team:

Emergency Dispatch Center received emergency call and send you to: 57 years old man unconsciousness, probably gasping, but family refuse to provide CPR.

# Your tasks:

- Assess scene and correct work management on site.
- Examine and treat the patient(s).
- Define working diagnosis and differential diagnosis, administer the therapy.
- Define direction according to local situation (see bellow). If hospitalization is needed, define mean of transport (see bellow).

# Conditions on the scene:

May 24, 2014, 00:30am., clouds, no wind, 12°C (54°F). Call to address time is 10 mins. All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCHER.

### Local situation:

- Nearest hospital: 20 km by ground transport. Depts: surgery, internal medicine (neurologists on duty nonstop), Anaesthesia and General Intensive Care, gynecology and А obstetric, CT, biochemistry.
- B Higher level hospital: 42 km by ground transport. Depts: as A + ED, ENT, oncology, psychiatry, infectious diseases and pediatric dept.
- Specialized centre: 55 km by ground transport. Depts: as B + traumacentre, burn unit, cardiocentre, stroke unit, NMR. С
- Leave the patient on the place.

# Mean of transport:

Information

E Helicopter rescue Arrival 15 mins. after request through Emergency Dispatch Center. Landing on the scene is possible. Team own ambulance. Ground G Ground - next ambulance with paramedic crew Arrival 15 mins. after request through Emergency Dispatch Center. H Ground - next ambulance with physician crew Arrival 15 mins. after request through Emergency Dispatch Center. Describe and justify to judge. Another н

Report to judge (example): "Direction A, transport F" and any additional information at their discretion.

# Situation on the scene:

Patient in terminal stadium of lung cancer. Decided to die at home, family is trying to help him in this situation. Hospice home care comes regularly and GP wisits patient regularly. Pain control set correctly. Patient seddenly deteriorated, got unconscious, gasping for breath. Family was not prepared for such situation, they do not know what to do andcall Emergency line for help, notify the dispatcher that a man (57 years old) fell unconscious and is gasping for breath. They follow dispatchers advice to put the patient on his back, but refused providing CPR. Familly is waiting in front of their house and will try to stop crew - if they cooperate - they will inform them, that their close relative is dying due to lung cancer and they will provide the crew with complete documentation from last visit at oncology. They called Emergency line bacause they don't want him to suffer. If the crew will not stop and listen to the family, rest of family will not go inside with them. Only patient's wife will go with them, will be sitting next to patient holding his hand. Patient is unconscious, occasionally gasping for breath, agonal rytmh on the monitor, puls oxymetry 0, CRT more than 3s, BP not measurable, after 2 miniutes cardiac arest, asystole, apnoe, death. Peitent in bed, no reaction, ocassionaly gasping for breath.

Wife try to inform crew about patient, give him out-patient report. She wants to stay with husband. She (figurant) will behave, as crew (as mirror - if they are kind, she is too, if they are agresive - she will expelling the cerw from house)

Rest of family will cooperate, but if crew will "treat too much" - they will tell tham, that they can't to be there and go away.

# Correct procedure:

Hear the family and receive all important information about the patient. Evaluate the situation and condition of the patient and decide not to start CPR. Support the family in their decision of taking the patient home from hospital to die among his relatives. Leave the family with patient and support their care - talking to him, holding his hand ... Assure the family that the patient is not suffering be empathentic.

State patient's death, inform family, identify the patient (ask for documents), inform family about next steps (correct procedure, funeral service, autopsy not indicated,...) - and do it empathetically, comprehensibly and repeatedly... Offer support ...

	Team scoring	1	2	3	4	5	Max. points 1 300	Correct decisions and performance
1	Introduction	Introduction of the crew	Correct communication, anamnesis, (only one to one speaking)	Acquire patient's report	Dg. terminal stadium of lung cancer	Respecting family	260	Peaceful approach to the family, getting all important information, take and read out patient repor, talking one to one, listen to family, effort not to exclude family from the situation.
		10	100	50	50	50		
2	Primary and secondary examination	Prim.survey	Sec.survey	EKG: agon. rythmus	Contact oncologist		190	Evaluate the clinical status, provide primary survey, (ABCDE), provide secondary survey, support family and give them information they want to knoow, be empathentic, contact oncologist, assure family, that he is not suffering (poits are given in therapy part).
		100	50	20	20			
3	Therapy	Do not start CPR (200) if CPR in progress - stopping just Dg is known (150)	Right supporting patient and his family during dying	Monitoring	State death and state the time of death	Inform family	410	Not to initiate CPR, if CPR already initiated, stop after past medical history has been taken. If CPR continues from any reason, then 0 points will be given. Support family during treatment and good communication with them - they did well - best for him, he died at home without pain, with family Monitoring of the patient and state death, inform family, state the time of death.
		200	100	30	50	30		
4	Next steps correct procedure "death management"	Doccuments 40	Comprehensibly and repeatedly inform about correct procedures	Offer help			190	Identificate patient (ask for documents), inform family, what to do now (correct procedure, funeral service,) - and do it empathically, comprehensibly and repeatedly Offer help (phone number, psychologist, with covering the body).
		40	100	50				
5	Team cooperation and communication	Clear and obvious leader of the crew	The crew communicates as a team and passes the information to the leader	The leader receives and responds to information from the crew	Managed and controlled patient handling	Communication with the patient and actors (calm down son) 20+40	100	Cooperation crew as a team, clearly acting in a prominent leader of the crew. Unambiguous and clear communication with the judge (not repeated queries on the same data /typical VS/), patients and other actors. Imagine after the arrival, inform the patient what we do, why we do it (taking off, testing, transport).
		20	20	20	20	20		
6	Actors (simulated patients, patient relatives, witnesses,	Patient	Partner	Family			150	Subjective evaluation by actors according actor's rules.
	bystanders etc.)	50	50	50				

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Story get to team with instructions.

Story for team:

Time limit for task:

Dispatch centre received emergency call:

It is possible to deal with seemingly impossible, too. Rallye Rejviz is game and fun after all!

# Your task:

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abseil down - rewarded by points profit

- go down by stairs not rewarded by points
- jump down from balcony disqualification (heirs may continue in competition with half of the points earned)

# Situation:

Everything happen for the first time sometimes. We could be proud to what we have achieved. Overrun own dread is great success!

# Instruction for task:

Paramedics crew compete together with dispatcher.

Г	Team scoring	1	2	2	4	5	Max. points	Correct decisions and performance	
	ream scoring	1	2	5	4	5	240	correct decisions and performance	
1	Abseil	1st member of crew	2nd member of crew	3rd member of crew	4th member of crew		240	240 Abseil down by firefighters assistance	Abseil down by firefighters assistance
		120/80/60	120/80/60	80/60	60				
2	By stairs	1st member of crew	2nd member of crew	3rd member of crew	4th member of crew			walk down by stairs with prior announcement to firefighters assistant	
		0	0	0	0				
з	Jump from balcony	1st member of crew	2nd member of crew	3rd member of crew	4th member of crew			qualification - clusion from jump down from balcony to the ground	
		disqualification	disqualification	disqualification	disqualification		competition		

Crew with 3 members - 80 points per person. Crew with 4 members - 60 points per person...

Time of performance is not included to final evaluation but task should be finished by each team in 15 min.

Prskavka	Den	MUC. RR NAT-RLP NAT-RZP	Rozhodčí:	Noriyoshi Ohashi, Kateřina Nováková Juraj Povinský, Zora Kurajská Adriana Povinská, Danica Pompošová
Sparkler	Day	INT-PHYS INT-PARA	Judges:	Noriyoshi Ohashi, Kateřina Nováková
Time limit for task:		max. 12 mins		

# Story get to team with instructions.

# Story for team:

Emergency Dispatch Center received emergency call and send you to: The chaotic young man calls, that his mother are terribly unwell, she has high fever, cough, sputters and suffocates.

# Your tasks:

- Assess scene and correct work management on site.
- Examine and treat the patient(s).
- Define working diagnosis and differential diagnosis, administer the therapy.
- Define direction according to local situation (see bellow).
- If hospitalization is needed, define mean of transport (see bellow) and prepare for transport.
- Known to the judge any further steps.

# Conditions on the scene:

Saturday May 24, 2014, 08:30am., clouds, no wind, 12°C (54°F). Call to address time is 10 mins. All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCHER.

# Local situation:

- Nearest hospital: 20 km by ground transport. Depts: surgery, internal medicine (neurologists on duty nonstop), Anaesthesia and General Intensive Care, gynecology and А obstetric, CT, biochemistry.
- B Higher level hospital: 42 km by ground transport. Depts: as A + ED, ENT, oncology, psychiatry, infectious diseases and pediatric dept.
- Specialized centre: 55 km by ground transport. Depts: as B + traumacentre, burn unit, cardiocentre, stroke unit, NMR. С
- Leave the patient on the place. D

# Mean of transport:

	Mean of transport:	Information
Е	Helicopter rescue	Arrival 15 mins. after request through Emergency Dispatch Center. Landing on the scene is possible.
F	Ground	Team own ambulance.
G	Ground - next ambulance with paramedic crew	Arrival 15 mins. after request through Emergency Dispatch Center.
н	Ground - next ambulance with physician crew	Arrival 15 mins. after request through Emergency Dispatch Center.
I	Another	Describe and justify to judge.

Report to judge (example): "Direction A, transport F" and any additional information at their discretion.

### Situation on the scene:

The young man (19 years), dismissed of ability to legal acts, live alone with her mother. The woman's health suddenly worses. She has fever = 39.8 °C, sometimes she can't inhale, she badly respire, her head feels rotating, flickering in front of her eyes. She has irritative cough with expectoration. The respiration frequency is 22 breaths per min., SpO2=88-90%, BP 110/60, HF 124/min. From personal anamnesis and medicaments, for which the crew should actively ask or from inspection of hanky with bloody and pus smudges and clinical survey the crew may as fast as possible determine the correct diagnosis – active open pulmonary tuberculosis, or possibly septic pre-shock condition. Immediately secure personal protection of crew (facial mask, at least one gloves), prepare the patient for transport (venous line, oxygen inhalation therapy - 4-5 l/min., antithussicum, right position of patient - sitting or semi-sitting down).

The crew must tame oligofrenic son before transport, which obstruct the crew in transport preparation after finding that his mother will be carried away. The crew must ensure hospitality of his next destiny too, because he is dismissed of legal age and can't remain alone in hermitage.

Patient (mother): wheezes, iritative coughs, she is white-faced, haloned and red eyes, repeatedly notice that son is not sui juris. Son: oligofrenic (IQ of imbecile level), terrified, weepy, doezn't understand context. Chaoticaly runs around and obstruct the crew in maintaining of medical help. Assertive and friendly crew access leads to calm, aggressive approach escalating aggression son.

FA: combination of five basic drugs - streptomycin, isoniazid, rifampicin, pyrazinamide, ethambutol - ambulatory 3 times a week. Vital functions: TT = 39.8°C/103.5°F, HF = 124/ min., BF = 22/min., BP 110/60, SpO2 = 88-90%.

### Key words:

Pulmonary tuberculosis, septic pre-shock condition, personal protection of crew, non sui juris oligofrenic.

	Team scoring	1	2	3	4	5	Max. points 1 300	Correct decisions and performance
1	Evaluation of situation and determination of diagnosis	Right dg. up to 2 mins (100) or right dg. After 2 mins (75) 100	Bonus: pre-shock condition diagnosis 50				150	Dg.: pulmonary tuberculosis + septic pre- shock condition.
2	Determination of working diagnosis, evaluation of all symptoms at place and survey	Personal history+ knowledge of medicaments at place 60+60	Evaluation of pulmonary hearing and oxygenation values. 30+30	BP+HF+temper ature 30+30+30	Hanky smudges inspection		330	Exhaustive clinical survey, control of vital functions, make diagnosis of sinusoidal tachycardia, marginal blood pressure and hyposaturation (BP, HF, SpO2, temperature, respiration, next circumstantial evidence at place credible support working diagnosis).
3	Protection of crew in contact with infect disease	120 Gloves and facial mask before arrival to place	60 Gloves and facial mask immediately after determination of diagnosis	90 Gloves and facial mask after examination and preparation of patient	60 Gloves or facial mask only		100	Immediately from call is already recognizable, that there may be infect disease with aerosol transfer. According to medicaments at place there is diagnosis of infect disease almost sure immediately after arrival. Protection of crew has priority before survey and treatment of patient, which has (although marginally) maintained basic vital functions.
4	Therapy	a) i.v. therapy	75 b) antitusikum	c) oxygen inhalation	d) position		160	According to symptoms of beginning septic shock there is necessary to secure enter into blood circulation with any ion solution, marginal respiration combined with respiration alveolocapillar malfunction improve by oxygen inhalation FiO2=3,6 to 4,0, i.e. 4-5 l/min. There is indicated antitussicum when irritated cough and body position at sitting down or semi-sitting.
5	Taming of son and ensuring of his next destiny: a) soothing conversation b) detention with assistance of second crew or police c) sedation	40 a) soothing conversation b) detention with assistance of second crew or police c) sedation	40 b) and c) only 140	40 b) only 70	c) only		210	According to young man unability to legal acts, there is not possible to leave him at place. Soothing conversation hasn't effect, therefore sedation and detention (best) with next paramedic and possible policeman accompaniment is recommended. It takes place on Saturday, welfare unavailable.
6	Direction, transport	Position at sitting down or semi-sitting 40	B by F 35+35 70				110	The patient doesn't make any obstacles during instruction about detention, she agree with therapy in facility specialised to tuberculosis therapy (infect disease or pulmonary clinic), where diagnosis will be confirmed and next possible routing will be secured.
7	Team cooperation and communication	Clear and obvious leader of the crew 20	The crew communicates as a team and passes the information to the Leader 20	The leader receives and responds to information from the crew 20	Managed and controlled patient handling 20	Communication with the patient and actors (calm down son) 20+40 60	140	Cooperation crew as a team, clearly acting in a prominent leader of the crew. Unambiguous and clear communication with the judge (not repeated queries on the same data /typical VS/), patients and other actors. Imagine after the arrival, inform the patient what we do, why we do it (taking off, testing, transport).
8	Actors (simulated patients, patient relatives, witnesses, bystanders etc.)	Mother	Son				100	Subjective evaluation by actors according actor's rules.
	,,	50	50		1			1

Additional questions judges important for proper evaluation: A - According to what has been diagnosed? B - How to solve the health and social situation of the son on the spot?

Qakino		MUC. RR	Rozhodčí:	Kateřina Ningerová, Táňa Bulíková	RALLYE REJVÍZ 2014
	Den	NAT-RLP		Kateřina Ningerová, Hana Vacková, Vlasta Vařeková	
		NAT-RZP		Táňa Bulíková, Renáta Trajtelová, Ladislava Budíková	
Qakino	Day	INT-PHYS	Judges:	René Mezuljaník, Miroslava Marková, Tomáš Ninger	
		INT-PARA	-		
Time limit for task:		max. 12 mins			Story get to team with instructions.

### Story for team:

Emergency Dispatch Center received emergency call and send you to:

Mr. Karel Alberto is calling EMS to the flat of his friend Mr. Roman Quakino, who has just experienced weakness and confusion during Karel's visit.

#### Your tasks:

Assess scene and correct work management on site.

Examine and treat the patient(s).

Define working diagnosis and differential diagnosis, administer the therapy.

- Define direction according to local situation (see bellow).
- If hospitalization is needed, define mean of transport (see bellow) and prepare for transport.
- Known to the judge any further steps.

### Conditions on the scene:

May 23, 2014, 11:30am, clear, no wind, 20°C (68°F). Call to address time is 10 mins. All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCHER.

Direction Ground distance Depa			Departments
A	Hospital A	8 km	Biochemistry (and Haematology, the same for next hospitals), General Surgical Ward, Internal Medicine Ward and Neurology Ward
в	Hospital B		Resuscitation Unit, CT Scanner, Biochemistry, Pediatric Ward and ICU, General Surgical Ward, Stroke Treatment ICU, Isolation (Infectious Diseases) Unit, Internal Medicine Ward, Neurology Ward and ICU, ENT Ward, Psychiatry, Emergency
с	Hospital C	30 km	Resuscitation Unit, CT and MR Scanners, Biochemistry, Pediatric Ward and ICU, General Surgical Ward, Isolation Unit,Internal Medicine Ward, Acute Coronary Syndrome Treatment Centre, Cerebrovascular Diseases Treatment Centre( higher level than Stroke Treatment Centre), Neurosurgery, Neurology Ward and ICU, ENT Ward, Burns Treatment centre, Psychiatry, Traumacentre, Emergency
D	Home D	0 km	Leave the patient on the place.

	Mean of transport	Information
Е	Helicopter rescue	Arrival 15 mins. after request through Emergency Dispatch Center. Landing on the scene is possible.
F	Ground	Team own ambulance.
G	Ground - next ambulance with paramedic crew	Arrival 15 mins. after request through Emergency Dispatch Center.
н	Ground - next ambulance with physician crew	Arrival 15 mins. after request through Emergency Dispatch Center.
Т	Another	Describe and justify to judge.

Report to judge (example): "Direction A, transport F" and add any additional information at their discretion.

#### Situation on the scene:

After arrival:

The patient is sitting at the table, wide awake, breathing spontaneously, he understands conversation partially. He can not talk but understands, he carries out an order, cooperates, he gives a nod to simple question.

# Correct procedure (for details see table):

It is necessary to obtain full medical history (high blood pressure, ischaemic heart disease, MI, stroke, diabetes, operations/surgery, cancer), medicines taken (there is a slip of paper with written medication in his personal ID cards) and allergies. It is important to take a telephone number of his friend, who witnessed his health problem and also of his relatives (a slip of paper in his IDs with names (Kacenka, Jenik). You must ask about pain, palpitations, shortness of breath, nausea/vomitus, fever.

Clinical status upon arrival: regular, palpable publics on a. radialis, regular heart rate, no murmurs. Breathing - symetrical air entry, alveolar, no pathological phenomenons. Abdomen is soft, no pain response to palpation, no palpable mass. Lower extremities with no oedemas, no signs of DVT.

Neurological assessment (FAST): expressive aphasia (he can not talk but he understands, can nod yes-no responses nonverbally), isomiotic pupils 2/2mm constricting to light, ocular movements are normal, decreased teeth showing on the right side, tongue is put out in medial line, no tenderness and normal movements of cervical spine. Upper extremities: Mingazzini test: slow fall on the right side, weak R hand squeeze, hit test normal. Lower extremities: Mingazzini test with no fall, wide stance, needs a help to walk but no signs of

Upper extremities: Mingazzini test: slow fall on the right side, weak R hand squeeze, hit test normal. Lower extremities: Mingazzini test with no fall, wide stance, needs a help to walk but no signs of paralysis. There are right hemisensory loss and no signs of meningeal irritation.

RESUME: fully conscious patient with normal circulation, FAST: expressive aphasia, right faciobrachial hemiparesis with right hemisensory loss.

### Anamnesis:

 Personal data
 Roman Qakino, born on 17. 9. 1967, adress: Jilkova 219, Brno, Health Insurance Card VZP (111)

 Medical history
 He denies smoking or illicit drugs abuse, suffers from high blood pressure, no history of heart disease, no history of stroke, no cancer treatment, he had an inguinal hernia surgery in 2009.

 Medication
 Betaloc ZOK 50 - metoprolol, Prestance 5/5 - amlodipine and perindopril, Sortis 40 - atorvastatin, Pantoprazol 40, Furosemid (a slip of paper with written medication in his wallet). If questioned, he denies taking of furosemide nowadays.

 Allergy
 Iodine - patient had an intravenous urography and had a problem (it is necessary to think about principles of emergency imaging and focus the question to iv contrast agent).

 Recent health problem
 He suddenly started with confusion - words in improper relation, a strange, uncertain walk to the toilet, he says nonsenses. He had one pint of beer during 2 hours visit of his friend, he does not drink beer regurally. It happened about 30 minutes prior to EMS crew arrival. If asked (goal directed) he confirms chest pain and palpitations.

Family medical history

Not available

Vital signs	After arrival	During task (3 mins after initiating monitoring)
Patient	Р	P
Pulse (/min)	80	cca 103 (irregular)
Resp. ateF (/min)	13	16
Capillary return time (s)	1 (as seen)	1 (as seen)
BP (mm Hg)	170/90	132/91
SpO2 (%)	97	95
Glycaemia (mmol/l)	6,7	6,7
Temperature (°C/°F)	36,8/98	36,8/98
GCS		E4 V5 M6=15/E4 V4 M6=14
ECG	Sinus	Atrial fibrillation with fast (rapid) ventricular response

#### Key words:

Contempt for work of healthcare providers in the chain of stroke patient care results from insufficient and bad communication and absence of feedback. What are hospital admitting personnel missing and what are EMS Crew missing?

	Team scoring	1	2	3	4	5	6	Max. points 1 300	Correct decisions and performance
1	Anamnesis	Medical history: 1) high blood pressure, 2) IHD, 3) MI, 4) stroke, 5) diabetes, 6) cancer, 7) operations, 8) head trauma 8x15	Abuse: 1) alcohol 2) smoking 3) illicit drugs 3x10	lodine Allergy	A slip of paper with meds and allergy found and checked: 1) medication, 2) recheck informations, 3) relatives phone numbers 3x20	Phone number, contact to his friend (surname, mobile phone number)	Exact time check of the onset of problems (30 minutes prior to EMS arrival)	370	Medical history at least in range written.
		120	30	80	60	20	60		
2	Examination, therapy	Neurological Assessment (FAST): 1) right facial nerve paralysis, 2) right upper arm paresis, 3) R hemisensory loss 3x20	BP, PR, SpO2, blood sugar level, temperature 5x10	Focused questions about: 1) chestpain, 2) palpitation, 3) headache 3x20	ECG sinus	1) Tachycardia recognizing 2) Paroxysmal AF identification 3) Iv access 3x20	Nauzea and vomitus questions 2x20	350	ECG monitoring is necessary during transportation to catch and document AF paroxysm - it is often the embolus from left atrium that causes stroke. AF paroxysm can be recorded at scene if ECG monitor left on 3 minutes after connection. Iv access - the best is green or wider cannula to be ready for angiography.
		60	50	60	80	60	40		
3	Direction, diagnosis	Direction B or C	Contact Stroke or Cerebrovascula r Treatment Centre by recorded phone call via emergency number (EMS Dispatch Centre) - 50 or directly from your phone - 25	1) Expressive aphasia 2) Mild right faciobrachial hemiparesis 3) Right hemisensory loss 3x30	Highlight the information about iodine allergy when talking to the Stroke Treatment Centre staff	Highlight the information about AF paroxysm when talking to Stroke Treatment Centre staff	Correct Glasgow Coma Scale scoring (GCS) E4 V5 M6=15 or E4 V4 M6=14	270	Adequate and correct description of stroke symptoms (triage positive) when talking to Stroke Treatment Centre physician, it is necessary to consult Neurologist throught recorded phone call via EMS Dispatch Centre to confirm triage positivity and agree with admission and tell him all important informations, especially possible iv contrast agent allergy (angiography is anyway possible but special caution is needed. The information about allergy would not be possible to recheck at the hospital due to neurological worsening to global aphasia). GCS - to be awarw what is checked - verbal response can be checken nonverbally and should be 4 or 5). GCS to be told to the Neurologist on call or he will ask EMS staff about that.
_		30	50	90	40	40	20		
4	Preparation for transport, transport	Pt must be ready for transport with established ECG monitoring and adequate iv. access 25	Transport F 25					50	Stroke Triage positive patient suffers from at least one primary "main" symptom or at least two secondary symptoms of acute stroke within 24 hours (clinical point of view) including fully improved symptoms - transitory ischaemia (time point of view). ECG to be monitored in the course of transport - see above).
$\vdash$		20	20	DAG					
5	Diagnostic and therapeutic reasoning	Stroke	PHYS: Atrial Fibrillation AF	PARA: Atrial Fibrillation AF or Narrow QRS Complex Tachycardia				60	Right diagnostic and treatment decision making.
		30	30	30					
6	Team cooperation and communication	Clear and obvious leader of the crew	The crew communicates as a team and passes the information to the Leader	the crew	Managed and controlled patient handling			100	Cooperation crew as a team, clearly acting in a prominent leader of the crew. Unambiguous and clear communication with the judge (not repeated queries on the same data /typical VS/), patients and other actors. Imagine after the arrival, inform the patient what we do, why we do it (taking off, testing, transport).
		20	20	20	20	20			
7	Actors (simulated patients, patient relatives, witnesses, bystanders etc.)		Friend					100	Subjective evaluation by actors according actor's rules.
L	. ,	50	50			l	l		

Vemeno		MUC. RR	Rozhodčí:	Zdeněk Tlustý, Eva Litvíková
	Den	NAT-RLP		Zdeněk Tlustý, Klára Střelečková
		NAT-RZP		Katarína Veselá, Eva Litvíková
Teat	Day	INT-PHYS	Judges:	Veronika Matušková, Jan Veselý
		INT-PARA		
Time limit for task:		max. 12 mins		

### Story get to team with instructions.

# Story for team:

Emergency Dispatch Center received emergency call and send you to: The man, about 30 years, jumped head first into the pool and screaming in pain.

# Your tasks:

- Assess scene and correct work management on site.
- Examine and treat the patient(s).
- Define working diagnosis and differential diagnosis, administer the therapy.
- Define direction according to local situation (see bellow).
- If hospitalization is needed, define mean of transport (see bellow) and prepare for transport.
- Known to the judge any further steps.

# Conditions on the scene:

May 23, 2014, 10:30am, clear, no wind, 22°C (72°F). Call to address time is 15 mins. All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCHER.

# Local situation:

- A Nearest hospital: 20 km by ground transport. Depts: surgery, internal medicine (neurologists on duty nonstop), Anaesthesia and General Intensive Care, gynecology and obstetric, CT, biochemistry.
- B Higher level hospital: 42 km by ground transport. Depts: as A + ED, ENT, oncology, psychiatry, infectious diseases and pediatric dept.
- C Specialized centre: 55 km by ground transport. Depts: as B + traumacentre, burn unit, cardiocentre, stroke unit, NMR.
- D Leave the patient on the place.

# Mean of transport:

### Information

 E
 Helicopter rescue
 Arrival 15 mins. after request through Emergency Dispatch Center. Landing on the scene is possible.

 F
 Ground
 Team own ambulance.

 G
 Ground - next ambulance with paramedic crew
 Arrival 15 mins. after request through Emergency Dispatch Center.

 H
 Ground - next ambulance with physician crew
 Arrival 15 mins. after request through Emergency Dispatch Center.

 I
 Another
 Describe and justify to judge.

Report to judge (example): "Direction A, transport F" and any additional information at their discretion.

# Situation on the scene:

A man about 30 years old, slightly drunk, as well as his girlfriend. She's also very agitated. He ran and jumped headfirst into the swimming pool, but there was no water. He's now lying on his abdomen, head turned to the side. He's screaming in pain, the most painful area is on the neck. He can't move with lower limbs, upper limbs are poorly movable and strongly tingling. You are able to pacify the girlfriend, than she's calmer and on your request also helpful.

Men's medical history: healthy, with no treated disease, he does not take any medication, allergy on penicillin.

Obj .: Pale, anxious, short of breath when communicating, looking diaphragmatic breathing, auscultation - bilaterally clean breathing, so signs of heart failure, heartbeats regular 50/min, without murmurs. Chest, abdomen and extremities without pathology.

Neurologically: lower limbs - complete plegia, upper limb - severe arm paresis, plegia below, parestesia, below the collarbone numbness. No evidence of concussion.

ECG: regular sinus bradycardia 50/min, or physiological curve.

Measured parameters: BP 75/40 mmHg, AS 50/min, SpO2 85 %, respiratory rate 24/min, temperature 36.0 C, glucose 6.2 mmol / L.

### Procedure:

a) Asessment of situation on site, communication with patient's girfriend and camling her down, estimation of injury severity, activation of air transportation within 2 minutes - prevention of delay.

b) ABCD, with emphasis on correct cervical collar application, right and delicate manipulation with patient.

c) Basic secondary survay, diagnosis: 1. spinal cord trauma 2. spinal shock

Therapy (is accepted):

1. Securing i.v. line 1 x, G20 or thicker, infusion at least 500 ml of krystaliod fluid, administration of oxygen by simple mask at least 2l/min.

2. No administration of corticosteroids - according to actual valid EBM recomendations.

3. Administration of analgosedation considering drunkness. Overdose leads to respiratory depression subsequentely decrease of oxygenation and perfusion. Inappropriate choice means unnecessary suffering so harm of the patient = points reduction.

4. All manipulation with patient has to be controlled. There has to be clear teamleader who organise whole team cooperation and also patients girlfriend on case site. All communication has to be delicate with regard to patient's severe diagnose and prognoses.

### Key words:

Cervical spine trauma, spinal shock, ATLS, technique of cervical collar application and manipulation with patient, team leader.

	Team scoring	1	2	3	4	5	Max. points 1 300	Correct decisions and performance
1	Patient history	Minimal personal data	Medication	Allergies			90	At least basic medical history, especially allergies (!).
		30	20	40				
2	ABCD	А	В	С	D		80	Primary survey acording to ATLS.
		20	20	20	20			
3	Therapy	I.v. line, crystaloid fluids min. 500 ml	Analgesia optimal (100) or problematic (25)	O2 by oxygen mask 2l/min	Respecting EBM		200	Basic secure considering hypotension, analgesia considering drunkenness. Optimal: Sufenta 5-10 ug/Fentanyl/Morphin in equiv. doses/Ketamin 0,25-0,5 mg/kg i.v. (i.o.). Dispoutable: insufficient dose/overdose, another analgetics or way of administration (see above). Respecting actual EBM principles (no corticosteroids administration etrc.)
		25	100	50	25			
4	Diagnosis	Cervical spine injury	Right lesion localisation	Spinal shock			200	Cervical spine injury, clasification on injury - approx. C5-C8 or "below brachial plexus", slinal shock.
		100	50	50				
5	Technics	Cervilac collar application	Safe logrolling, using spineboard, scoop	Prevention of C- spine movements	Immobilization		325	Right technique of cervical collar application, relocation on stretcher with no potential harm of patient. Optimal is use od spineboardu, scoop, head immobilisation etc.
		100	100	75	50			
6	Direction, transport	Request for air transportation within first 2 minutes	C by E	C by F			125	Right direction - trauma center via HEMS (rapid and delicate).
		25	100	25				
7	Team cooperation and communication	Clear and obvious leader of the crew	The crew communicates as a team and passes the information to the Leader	The leader receives and responds to information from the crew	1) Managed and controlled patient handling 2) Involvement of partners in handling 10+10	Communication with the patient and actors (master's reactions, appropriate form of patient information)	120	Cooperation crew as a team, clearly acting in a prominent leader of the crew. Unambiguous and clear communication with the judge (not repeated queries on the same data /typical VS/), patients and other actors. Imagine after the arrival, inform the patient what we do, why we do it (taking off, testing, transport). Zvládnutí vlastní posádky i partnera, komunikces u paciente so závožneu do
		20	20	20	20	40		komunikace u pacienta se závažnou dg.
8	Artistic impression	A: Logical and organised work	B: Right administration of infusions and drugs	C: Technique of work with scoop/spineboa rd			60	A: Like in real situation, logic subsequent actions, prevention of patient harm (do first what is not painful and possible to do when patien is lying on his abdomen, than i.v. line and i.v. analgesia, logroll - directly on scoop+ cervical collar, subsequent examination and treatement). B: Infusion, lying on the ground is not working - someone has to hold it or hang it somewhere! C: Scoop - right length, connection, disconect without force. Spineboard - minimal tilting, secure with sidewalls.
		20	20	20				
9	Actors (simulated patients, patient relatives, witnesses,	Patient	Partner				100	Subjective evaluation by actors according actor's rules.
I I	bystanders etc.)	75	25					

Volba		MUC. RR	Rozhodčí:	Francis Mencl, Miroslav Ptáček	RALLYE REJVÍZ 2014
	Noc	NAT-RLP		Tomáš Vaňatka, Miroslav Ptáček	
		NAT-RZP		Denisa Osinová, Karel Žatecký	
Choice	Night	INT-PHYS	Judges:	Francis Mencl, Radana Tichá	
		INT-PARA		Dan Celik, Tomáš Beran	
Time limit for task:		max. 10 mins			Story given to team with instructions.

Storv for team:

Emergency Dispatch Center received an emergency call and sends you to: Depressed man threatening to jump off a roof. Police on site.

# Your tasks:

- Assess the scene.
- Identify and examine the patient(s).
- Establish a working differential diagnosis and identify life threats.
- Treat the patient(s).
- If hospitalization is needed, identify destination and optimal mode of transportation

# Conditions on the scene:

May 24, 2014, 1:30am, clear sky, calm, temperature 10°C (50°F). Call to address time is 5 mins. All requests and information towards Emergency Dispatch Center should be directed to judge marked as DISPATCHER.

# Medical facilities:

- Nearest hospital: 20 km by ground transport. Depts: surgery, internal medicine (neurologists on duty nonstop), Anaesthesia and General Intensive Care, gynecology and obstetric, Α CT biochemistry
- Higher level hospital: 42 km by ground transport. Depts: as A + ED, ENT, psychiatry, infectious diseases and pediatric dept. в

Team own ambulance.

- C Specialized centre: 55 km by ground transport. Depts: as B + traumacentre, burn unit, cardiocentre, stroke unit, NMR.
- D Leave the patient on the place.

# Mode of transport:

E Helicopter rescue

- F Ground
- Ground next ambulance with paramedic crew
- H Ground next ambulance with physician crew
- Another I.

Arrival 15 mins after request through Emergency Dispatch Center. Arrival 15 mins after request through Emergency Dispatch Center. Describe and justify to judge.

Information Arrival 15 mins after request through Emergency Dispatch Center. Landing on the scene is possible.

Report to judge (example): "Direction A, transport F" and any additional information at their discretion.

# Situation at the scene:

Upon arrival the police inform you that the man just jumped (or fell!). They found a needle and syringe nearby. They know him - he suffers depression and abuses drugs. Patient unresponsive with a severally bleeding leg, a respiratory rate of 8, heart rate of 70 (blood pressure initially 100/65 - a combination of blood loss and heroin effect). Within 1 minute of arrival it will be 80/50 and untreated within 2 minutes it will be 70/30. Oxygen saturations will drop too.

Bleeding should be addressed first and then airway and/or reverse overdose. The bleeding is not controlled with pressure, requires a tourniquet. If the naloxone is given too quickly and/or in too large a dose patient will respond violently. This results in increased bleeding and if intubated the tube being pulled out. Initially primary and secondary exams show no other major abnormality. However he has internal injuries and he starts, or continues, to deteriorate further. He must be reexamined!

Resuscitation should be using principles of permissive hypotension. If ambulances carry blood/plasma that can be given as well.

# Critical actions:

Immediate tourniquet (recognition of the greater life threat). Primary and secondary exam (suspecting internal injury from mechanism). Consideration for neck and back injury and proper immobilization. Oxygenation & ventilation - controlled reversal of respiratory depression (heroin overdose). Fluid/blood resuscitation - permissive hypotension.

# Physical examination:

Initial BP 100/65, 70, 8, pulse ox 89%, unresponsive Pulsating extremity hemorrhage, not controlled with pressure Breathing shallow, lungs clear

Radial pulse weak

The remainder of the exam shows no obvious injury (no hematoma, no abrasions etc)

Abdomen is soft (he is sedated), pelvis is stable

Pupils are pinpoint, nonreactive to light

# Goal of task:

1) Importance of hemorrhage control (CAB - circulation, airway, breathing) tourniquet application

- 2) Recognition and reversal of opioid (heroin) overdose, airway management & proper technique
- 3) Importance of reassessment and recognition of ongoing problems (internal bleeding)
- 4) Permissive hypotension in resuscitation from hemorrhagic shock

	Team scoring	1	2	3	4	5	Max. points	Correct decisions and performance
	, ,						1 300	
1	Scene	Quick scene size up, scene safety	Identifying and seeking out police officer				50	Organized approach to the scene, situation evaluation, identifying police as potential historian & assistant well as for crowd control.
<u> </u>		25	25					
2	Identification of immediate life threat & hemmorhage control	Immediate tourniquet application	Slight delay (eg to take a quick pulse check, BP etc)	Pressure dressing(s) applied	Tourniquet applied after pressure dressings fail		175	Recogniton of life threatening hemorrhage. Tourniquet applied immediately. Team allowed to check for pulse and BP but with minimal delay and with someone applying pressure to the wound. Delays for airway management and especially failure to apply pressure and or tourniquet will cost the team points.
		175	150	100	50			
3	Airway management	Supplemental oxygen	BVM ventilations	Using pulse ox and/or capnography to guide ventilations and treatment	Advanced airway after hemorrhage control	Advanced airway before hemorrhage control	200	Recognition of respiratory depression and inadequate oxygenation. Supplemental oxygen and BVM ventilation is adequate. Respiratory depression will reverse with a small amount of naloxone. Intubation not required. If intubated do not reverse opioid.
-		50	75	50	25	10		
4	Consideration for orthopedic/spine injuries	CC Immobilization 50	Spinal immobilization 50				100	There are no head or spine injuries in this patient however the mechanism is suspicious and because of his diminished level of consciousness it cannot be ruled out.
								Permissive hypotension is preferred.
5	Blood pressure and managment of shock	2 IV lines bolus to SBP of 80-90	TXA given	Blood products/plasm a write in type			200	Aggressive fluid administration worsens bleeding and results in dilation of coagulation factors and worsens outcome. TXA (tranexamic acid) and blood products preferred. Permissive hypotension is preferred.
<u> </u>		150	25	25				
6	Management of opioid overdose	Recognition (respiratory depression, pinpoint pupils) vs admin for decreased responsiveness	Titrated nalaxone		Circle route of adminstration: intranasal route IV	Check if Nalaxone administered following intubation	100	The goal of opioid reversal is reversal of respiratory depression, not full awakening/withdrawal. This is best accomplished by titrated doses of naloxone. At any rate following intubation it should be avoided. Naloxone: 0,4 mg repeat x 1
		50	50					Naloxofie. 0,4 mg repeat x 1
7	Reassessment & recognition of ongoing internal blood loss	Unprompted reassessment	Prompted (eg by changing vital signs etc)	Recognition of ongoing blood loss	IVF boluses only to maintain SBP 80-90		175	Reassessment is crucial as is the recogniton of ongoing internal hemmorhage. Avoid excessive fluid administration. If TXA (tranexamic acid) and/or blood products available and have not been started yet now is the time.
		100	25	50	25			
8	Direction & transport decision	Helicopter decision to transport in <5 mins	Helicopter decision to transport in >5 mins	C - Trauma Center decision to transport in <5 mins	C - Trauma Center decision to transport in >5 mins		100	Teams should quickly recognize this is a major trauma and activate helicopter services as soon as possible
┣_		50	25	50	25			
9	Team cooperation and communication	Clear and obvious leadership	Good team communication	The leader receives and responds to crew information	Coordinated patient care, team members know and perform their tasks	Good communication with the victim, bystanders, family etc	100	There is a leader who directs the team, delegates tasks and overseas the scene, and is receptive to feedback from the others. The team is receptive to the leader's direction but unafraid to question him when needed. Orders are repeated back as they are received and completed There is respect among team members and a willingness to help each other. The patient is treated with respect, their privacy and concerns are addressed and explanations
⊢		20	20	20	20	20		provided.
10	Actors (simulated patients, patient relatives, witnesses, bystanders etc.)	Patient	Policeman				100	Subjective evaluation by actors according actor's rules.
L	-	80	20					

; Zámek		MUC. RR	Rozhodčí:	Silvia Trnovská, Dagmar Majerová, Roman Remeš	RALLYE REJVÍZ 2014
	Den	NAT-RLP		Silvia Trnovská, Dagmar Majerová, Ľubomír Hudák	
		NAT-RZP		Roman Remeš, Ludovít Priecel, Martin Šarišský	
Castle	Day	INT-PHYS	Judges:	Sara Lary, Emel Bozkurt, Ahmet Ozkan	
		INT-PARA			
Time limit for task:		max. 15 mins			Story get to team with instructions.

### Story for team:

Emergency Dispatch Center received emergency call and send you to:

In a decaying chateau, which was resided by homeless people, broke a fire. There are firefighters at the place who located the fire and extinguished it. Ventilation of the place is going on. There is an unindentified number of people inside the building. You are the first crew at the place.

# Your tasks:

- Assess scene and correct work management on site.
- Examine and treat the patient(s).
- Define working diagnosis and differential diagnosis, administer the therapy.
- Define direction according to local situation (see bellow). If hospitalization is needed, define mean of transport (see bellow).
- Known to the judge any further steps.

### Conditions on the scene:

May 23, 2014, 07:30am., clouds, no wind, 12°C (54°F). Call to address time is 10 mins. All requests and information towards Emergency Dispatch Center tends to judge marked as DISPATCHER.

### Local situation:

- A Nearest hospital: 20 km by ground transport. Depts: surgery, medical ward, gynecology and maternity departement, CT, biochemical laboratory.
- Higher level hospital: 42 km by ground transport. Depts: as A + emergency departement. ENT, oncology, psychiatry, department of infectious diseases and of children's care with B IMC (intermediate care).
- C Specialized centre: 55 km by ground transport. Depts: as B + trauma center, departement for burns, cardio center, stroke unit, magnetic resonance, paediatrics clinic with ICU. D Leave the patient on the place.

	Mean of transport:	Information
Е	Helicopter rescue	Not available.
F	Ground	Team own ambulance.
G	Ground - next ambulance with paramedic crew	Arrival 15 mins. after request through Emergency Dispatch Center.
н	Ground - next ambulance with physician crew	Arrival 15 mins. after request through Emergency Dispatch Center.
1	Another	Describe and justify to judge.

Report to judge (example): "Direction A, transport F" and any additional information at their discretion.

#### Situation on the scene:

In a decaying chateau, which was resided by homeless people, broke a fire. There are firefighters at the place who located the fire and extinguished it. Ventilation of the building is going on, the firefighters are searching the rest of the chateau where there was no fire. When the crew comes, the commander of the firefighters provides basic information the fire extinguished, evacuation of the place is going on, ventilation as well, sorting according to START has taken place - 8 people at the place, 6 x black, 2 x red. The place, where they are, is safe now. When the crew comes to room, the procedures in the way of massive accident are going on - retriage through crew. After retriage's ending (aprox. after 1 min) is firefighter coming with adult patient. He has found him in one of the alcoves where there hasn't been any fire. An adult (P1) is probably under the influence of alcohol, he is burnt on his arms and hands, the burns of I and II level, he is holding a blanket in his hands, he doesn't want to let it go. After some time of persuading, he is handing the blanket over - a baby is wrapped in the cover - a newborn (P2) - the age is determined according to the umbilical cord - approximately five days. The baby is pale, hypoventilates, hert action present 85/min.

### Priorities:

1) Retriage: sorting took place according to START, realization of retriage is necessary - categorization - 8 patients - black.

2) P1 - priorities: commication, ABCD, analgesia, covering the burns, oxygen, transport.
3) P2 - ABCD, 5 x inflation breaths, effective ventilation, termo-plastic wrap, monitoring the vital functions, transport. In context of change the exit way (5 minutes to ambulance), is necessary to realize the assessments and treatments on the scene place, but on the other side consider the possibility of danger - only really essential medical acts must be done and definite treatment takes place in vehicle. Transport to vehicle is demonstrated after judge's instruction (in 9th min).

4) Communication with MOC goes on dynamically - more casualties accident, the situation is changing in the time - only 2 injured persons, proposal to cancelling the truma plan, request for 1 PARA/PHYS team. In 9th min comes the information about acute danger - immediate transport.

Emphasis is put on: communication, organization of work, observation of work of teamleader (TL) and his team.

# Physical examination:

Patient P1 (adult): GCS 15, lightly confused - stress reaction, BF 25/min, HF 115/min, BP 140/80 mmHg, SpO2 86%, capillary refill <2 sec. Iso pupils, fotoreaction norm, clear breathing, without stridor, burns on both arms and hands - approximately 4%, of I and partly of II level, strong pain of arms and hands, no foeter ethylicus. Patient P2 (newborn): the state of consciousness - according to AVPU - "P" BF 8/min (the best option is to determine it in an auscultatory way), BP unmeasureable, peripheral pulse impalpable (a. brachialis, a. femoralis), SpO2 unmeasureable peripherically, on auricle under 65%, capillary refill cannot be evaluate, temperature 35,1 C, skin - pale, breathing is shallow, breath efforts. Age: 5 days, slightly hypotrophic, no burns.

Patients P3 - P10: after retriage - category black - death (exitus letalis) from burns (charred) + asphyxiation.

	Team scoring	1	2	3	4	5	Max. points 3 900	Correct decisions and performance
1	Organization of work (steps are evaluated in chronology!)	Communication with the scene commander (firefighter) + finding out of START	Communication with medical operation center	Priorities + delegation of the tasks by the teamleader	Retriage - Crew	Decision of the teamleader of the examination extention and treatment	370	<ol> <li>The commander of firefighters - an accident,possible danger, number of crews, number of injured/triaged patients,triage in the way of START - firefighters.</li> <li>Mediacal Operaton Center - a place, an accident, accessibility, number of injured, presence of rescue teams (Firefighters, EMS, Police), safety measures for rescue teams</li> <li>Team safety + dividing of team: retriage // record // basic acts.</li> <li>An advance in the way of more casualties accident, retriage through team, 8 patients - category - death.</li> <li>The situation's change - 2 patients have been founded, immediate decision about assesement and treatment - only basic acts, in the considering of potentional danger (crew is being warned from firefighter about safety situation's changes). The instruction about act's extent needs to be given clearly by the teamleader.</li> </ol>
		10	50	60	150	100		

	Organization of work (the steps are evaluated in chronological order) parts 1/5, 2/1,2/ 2 are going on simultaneously!	Dividing patients P1 and P2 by teamleader 60	Information for the teamleader of the P1 state + treatment consultation	Individual work of the teamleader with newborn 160	Communication with medical operation center	Efficiency vs. invested energy 250	730	paramedic, P2 - teamleader, with MOC communicates other team member 2) Treatment of P1 - ABCD, providing information to the teamleader 3) TL - independence - he needs to manage P2 on his own, simultaneously coordinates work of others 4) Communication with medical operation center - stating the number of patients, request for one PHYS/PARA team 5) Accurate, timed, coordinated, highly effective, absolutely purposeful used energy, no purposeless movements (e.g. purposeful placing of equipment, they take only the most necessary stuff from their suitcase, they do not run among the patients, they know who is who and who does what, etc)
								1) Clear, effective, few words, quick
3	Evaluation of the team	Communication inside the team	Communication with the patient and the others (firefighters)	Cohesion of the team + trust	Team's technique at collecting informations + consensus	Team member participation at fulfilling the task	790	<ol> <li>Joical, click, ice words, data understanding among team members.</li> <li>Polite, non-conflicting, empathic.</li> <li>Sharing the mental processes, trust - e.g. leaders trusts in relevance of information from paramedic.</li> <li>Informations need to go to the teamleader and the communication among team members going on at the same time, evaluation of the situation.</li> <li>50% - the teamleader, others 25%, activities need to be balanced (not everything is done by one member, other team members do not work only on commands as well).</li> </ol>
		150	240	100	150	150		, ,
4	Evaluation of the teamleader	Determination of the priorities and work delegacy	Responsibility for the rest of the members, risk evaluation, safety	Ability of situational and operational management at the situation change	Independent fulfilling of his part of the task	Consultating support to other team members	770	<ol> <li>Clear recognition of decision and management by the teamleader, analysis and evaluation of informations.</li> <li>Teamleader realizes his responsibility, drawing attention on a possible risk, instructs the members, the situation has sudden changed in 9. minute, obvious danger, prompt decision about leaving the scene with appropriate equipment.</li> <li>Prompt reaction at the change of the situation, a high level of attention, situational management focused on the indvididual teammembers.</li> <li>Able independently fulfil the medical part of the task (despite various openings - consultations, situation analysis), is being evaluated according to P2-ventilation (is not interrupt, when TL should manage other problem).</li> <li>Despite his own work, he is able to consult other team members, i.e. it does not disturb the teamleader.</li> </ol>
_		150	120	200	200	100		
5	Assesement	P3-P10: retriage (8 x death), a list 8x10 80	P1: ABCD GCS+BF+HR+ BP+SpO2+Cap. refill 7x10 70	hands and arms	P2: ABCD AVPU+BF+HR+ BP+SpO2+temp erature+ without burns 7x10 70	P2: Mature infant, slightly hypotrophic 2x10 20	270	1) Retriage - usage of the cards is not necessary, list of numbers, result: 8 x death 2) GCS 15, BF 25/min, HR 115/min, BP 140/80 mmHg, SpO2 86%, capilary refill <2 sec. 4) The state of consciousness - according to AVPU - "P" BF 8/min (the best option is to determine it in an auscultatory way), BP unmeasureable, peripheral pulse impalpable (a. brachialis, a. femoralis), SpO2 unmeasureable peripherally on auricle under 65 %, capillary refill cannot be evaluate, temperature 35,1 C, skin - pale, breathing is shallow, breath efforts
						20		
6	Treatment (priorities) + diagnoses	P3-P10: Without treatment, dg.: carbonized + asphyxiation 30+60+30	P1: O2 + analgesia + covering the burns 15+30+15	P1: Burns on the hands bilat. I and II level - 4% + suspect intoxication by fire combustion + stress reaction 60+30+30	P2: Efficient ventilation + thermo plastic wrap + reevaluation vital functions 200+50+50	P2: Asfyxia + suspect intoxication of fire combustion 60+30	690	<ol> <li>Analgesia: sufentanil/fentanyl, ketamine + dormicum, we prefer i.m., i.n. oder usage of MAD, covering the burns - Waterjell.</li> <li>Iaying a baby on a underlayment, 5x inflation breaths, after breathing is SpO2 and HF increasing, it is necessary to take care of breathing the baby - as a system of a supportive ventilation is ambubag enough + Guidel airway, O2 up to 3/l, emphasis put on utility and effectivity of the ventilation - holding the mask, NO head over-reclination, NO pressure on a submental space, how goes on assessing the vital functions: skin colour, HR - phonendoscope stuck to the chest, rising the chest, continual monitoring, the aim SpO2 over 90%</li> </ol>
		120	60	120	300	90		<u> </u>
7	Direction, transport	P3-P10: Call coroner / physician or DVI team	P1: PHYS: A via G PARA: A via F 25+25	P1: Way of transport from the building	P2: Way of transport from the building:	P2: PHYS: C via F PARA: C via H 25+25	280	<ol> <li>According to crew's national system</li> <li>Walking - escort by firefighter</li> <li>Exact team's coordination by the transport of P2</li> </ol>