



Creating simulated patient accessible checklise

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Simulation og performance

I vores teamtræninger har vi på Hvidovre Hospital været vant til at benytte DIMS facilitatormodel.

Modellen lægger vægten på

1. Et trygt læringsrum for simulation
2. Et læringsudbytte hvor rammen rummer naturlige læringsmål, men uden personlig bedømmelse og hvor den lærende i høj grad selv - ved egen indsigt gennem debriefing – opnår personligt læringsudbytte

Simulation og performance

Simulation i dag arbejder dog også med mere tydelige eksterne vurderinger af simuleringer – nyttigt ved egentlige prøver som fx. OSCE eksamen, men også fx ved simulation uden megen tid til debriefing og af tekniske procedure.

Creating simulated patient accessible checklise

I workshoppen skulle vi arbejde i forskellige grupper der anvendte 5 metodiske tilgange til bedømmelse af teamets præstation:

- 1. ACLS Mega code Performance Score Sheet**
- 2. Clinical Teamwork Scale**
- 3. Team Emergency Assessment Measure**
- 4. The clinical performance tool (CPT)**
- 5. Mayo High Performance Teamwork Scale**

Vi vurderede 5 metoder
i 5 grupper med udgangspunkt
i et videofilm tilkald til hjertestop



Gruppe 1: Vurdering af Teamlederfunktion med pointscore ACLS Mega code Performance Score Sheet

Udfordring:

Der blev kaldt på hjælp til hjertestop men der var løbende skift af teamleder efterhånden som den tilførte faglige kapacitet bidrog med stigende faglige/beslutningsmæssige kompetencer.

Konklusion:

Tydeliggørelse af var og hvem der skulle vurderes på skema?

Mgt. blev teamleder - vore
- 1 papir på hver person ville blive
hjulpet.
Teamleder skift - hvem skiftede hvem

ACLS Mega Code Performance Score Sheet (Modified)

Circle the number that corresponds to your rating of this individual's performance.

Scale: 1 - Not competent, 7 - Highly competent

1. The Team Leader assured that high-quality CPR was in progress	1	2	3	4	5	6	7
2. The Team Leader assured that monitor leads were attached	1	2	3	4	5	6	7
3. The Team Leader assured that monitor leads were attached and secured	1	2	3	4	5	6	7
4. The Team Leader assured the airway was being managed appropriately	1	2	3	4	5	6	7
5. The Team Leader assured the rhythm was being managed appropriately	1	2	3	4	5	6	7
6. The Team Leader properly utilized de fibrillation	1	2	3	4	5	6	7
7. The Team Leader ordered the correct medication treatment for the initial rhythm	1	2	3	4	5	6	7
8. The Team Leader followed the appropriate ACLS algorithm	1	2	3	4	5	6	7
9. The Team Leader recognized the ECG rhythm changes	1	2	3	4	5	6	7
10. The Team Leader provided appropriate care	1	2	3	4	5	6	7
11. The Team Leader demonstrated confidence	1	2	3	4	5	6	7
12. The Team Leader appeared knowledgeable	1	2	3	4	5	6	7
13. What is your overall feeling about this Team Leader	1	2	3	4	5	6	7
14. What is your overall feeling about this Team	1	2	3	4	5	6	7

delider!
P, W, R

- skift skema 3 pers performance

Gruppe 2:

case
individual scoring -> udfordring -> lav variation i *Gruppe bed*
only

Vurdering af teamets samlede præstation groft opdelt og igen undergraddelt af præstation

Clinical Teamwork Scale

Udfordring:

Der var lagt op til at score den samlede præstationer i forhold til opnåelse af fx kommunikation, situation awareness og kritisk beslutningstagen.

Konklusion:

Skemaet bedømte den samlede præstation, meget differentieret, men der er behov for en mere individuel bedømmelse, da individuelle præstationer kan have stor påvirkning på samlet udkomme.

Overall	Not Relevant	Unacceptable	Poor	Average	Good	Perfect
1. How would you rate teamwork during this delivery?						
Communication						
2. Overall Communication Rating:		0	1 2 3	4 5 6	7 8 9	10
3. Orient new members (SBAR)	<input type="checkbox"/>	0	1 2 3	4 5 6	7 8 9	10
4. Transparent thinking	<input type="checkbox"/>	0	1 2 3	4 5 6	7 8 9	10
5. Directed communication	<input type="checkbox"/>	0	1 2 3	4 5 6	7 8 9	10
6. Closed loop communication	<input type="checkbox"/>	0	1 2 3	4 5 6	7 8 9	10
Decision Making						
7. Overall Situational Awareness	<input type="checkbox"/>	0	1 2 3	4 5 6	7 8 9	10
8. Resource allocation	<input type="checkbox"/>	0	1 2 3	4 5 6	7 8 9	10
9. Target fixation	<input type="checkbox"/>	0	1 2 3	4 5 6	7 8 9	10
Other						
10. Overall Patient Safety Rating	<input type="checkbox"/>	0	1 2 3	4 5 6	7 8 9	10
11. Prioritize	<input type="checkbox"/>	0	1 2 3	4 5 6	7 8 9	10
Role Responsibility (Leader/Helper)						
12. Overall Role Responsibility	<input type="checkbox"/>	0	1 2 3	4 5 6	7 8 9	10
13. Role clarity	<input type="checkbox"/>	0	1 2 3	4 5 6	7 8 9	10
14. Perform as a leader/helper	<input type="checkbox"/>	0	1 2 3	4 5 6	7 8 9	10
Additional Notes:						
15. Patient friendly	<input type="checkbox"/>	0	1 2 3	4 5 6	7 8 9	10

Gruppe 3:

Vurdering af teamleder og hold med enkel rating af samlet præstation Team Emergency Assessment Measure

Udfordring:

Teamet vurderes med en enkel score 0 – 5 på Lederskab, teamwork, Opnåelse af behandling og ”overall performance” med en score fra 0 – 10 med mulighed for kommentarer.

Konklusion:

Skemaet lægger ikke op til detaljer – begrundelse for de valgte point.

Er meget generel i sin bedømmelse af den kliniske simulering

Handwritten notes:
- Uvæn
- Score om af fresh air sup
- schiff's best assess

Team Emergency Assessment Measure (TEAM)

Introduction
The TEAM has been designed to measure the ability of a team to respond to an emergency (e.g. test, simulation, or real life) and the team should complete the questionnaire to ensure secure performance, rating and feedback of leadership, teamwork, situation awareness and task management. Rating prompts are included where applicable. Please rate the first 11 items using the following scale and the last item using the 10 point scale.

Team Identification

Date _____ Time _____ Place _____
Team Leader _____ Team _____

Leadership: It is assumed that the leader is either designated, has emerged, or is the most senior – if no leader emerges allocate a '0' to questions 1&2. 0 1 2 3 4

1. The team leader let the team know what was expected of them through direction and command

2. The team leader maintained a global perspective
Prompts: Monitoring clinical procedures and the environment?
Remaining 'hands off' as applicable? Appropriate delegation?

Team Work: Ratings should include the team as a whole i.e. the leader and the team as a collective (to a greater or lesser extent). 0 1 2 3 4

3. The team communicated effectively
Prompts: Verbal, non-verbal and written forms of communication?
Team readiness to the role/competence/skill/speciality

5. The team acted with composure and control
Prompts: Appropriate equipment? Prompt response?
The team mood was positive

6. The team worked together positively
Prompts: Appropriate support, confidence, spirit, optimism, determination?

7. The team adapted to changing circumstances
Prompts: Appropriate support, confidence, spirit, optimism, determination?
Situation changes: Patient deterioration? Team changes?

8. The team monitored and reassessed the situation

9. The team anticipated potential actions
Prompts: Preparation of defibrillator, drugs, airway equipment?

Task Management 0 1 2 3 4

10. The team performed tasks

11. The team followed approved standards/guidelines
Prompt: Some deviation may be appropriate?

Overall 1 2 3 4 5 6 7 8 9 10

12. On a scale of 1-10 give your global rating of the team's performance

Comments: _____

Gruppe 4:

Vurderinger af tekniske opnåelse af behandlingsmål

The clinical performance tool (CPT)

Udfordring

Et enkelt pointsystem med vurdering af tjekliste for gennemførsler af livredende behandling.

Konklusion:

Tjeklister er taknemmelige, men hvis situationen er kompliceret – flere kompetencer involveret ikke eksemplarisk kan det reelt være svært at bedømme en algoritme

1. m. 2016
deserb at kunne handle -
men mest at gøre uendelse

Table 1. The Clinical Performance Tool (CPT)

Task	0 Points	1 Point	2 Points
STAGE 1: Shock (tachycardia, hypotension, tachypnea) – 2 minutes			
Assess breathing	● Not done	● >30 sec ● Done by auscultation only (no recognition of normal breath sounds)	● <30 sec, auscultation, tachypnea and WOB assessed
Pulse Check	● Not done	● >60 sec	● <30 sec
Blood pressure	● Not done	● >120 seconds (ie. Done in stage 2)	● <120 seconds
IV/IO	● Not done	● One PIV / IO done in >120 seconds (ie. Done in stage 2)	● One PIV / IO done in <120 seconds
Fluid bolus	● Not done	● Wrong fluid ordered ● Wrong amount ordered	● 20 cc/kg isotonic fluid ordered
STAGE 2: VF arrest or Pulseless Vtachi arrest – 8 minutes			
Pulse check	● Not done	● >30 seconds after VF occurs (scenario time clock >2:30) ● Peripheral pulse checked	● <30 sec after VF occurs AND central pulse checked (scenario time <2:30)
Rhythm Identification	● Not done	● Does not verbalize rhythm but demonstrates awareness of rhythm ● Verbalizes incorrect rhythm	● Verbalizes correct rhythm
Effective ventilation	● Not done	● >30 seconds after apnea occurs (scenario time >2:30) ● Improper rate or tidal volume	● <30 sec after apnea occurs (scenario time <2:30) ● Proper ventilation rate and tidal volume
CPR	● Not done	● >30 sec after pulselessness recognized (scenario time >2:30) ● Poor CPR technique (wrong hand position, improper rate, disruptions in CPR, does not check pulse with CPR)	● <30 sec after pulselessness recognized (scenario time <2:30) AND good CPR technique AND checks pulse with CPR
Defibrillation (first)	● Not done ● Attempted but electricity not delivered to patient (e.g. pads not on, etc.)	● Wrong dose ● Wrong mode ● >90 sec after rhythm change (scenario time >3:30)	● <90 sec after rhythm change (scenario time <3:30) AND correct dose AND correct mode
CPR continued	● Not done	● Delayed for >30 seconds ● Poor CPR technique (wrong hand position, improper rate, disruptions in CPR, does not check pulse with CPR)	● Initiated immediately following first shock with no delay and no pulse check, AND good CPR technique AND checks pulse with CPR
Defibrillation (second)	● Not done ● Attempted but electricity not delivered to patient (e.g. pads not on, etc.)	● Wrong dose ● Wrong mode ● >120 sec (or >5 cycles of CPR) after last shock (scenario time >5:30) ● Does not verbalize rhythm but demonstrates awareness of rhythm ● Verbalizes incorrect rhythm	● Done 120 sec or 5 cycles of CPR after last shock (ie. scenario time <5:30) AND correct dose AND correct mode
Pulse Check	● Not done	● Done >30 sec after second shock	● Done immediately after second shock
CPR continued	● Not done	● Delayed for >30 sec ● Poor CPR technique (wrong hand position, improper rate, disruptions in CPR, does not check pulse with CPR)	● Initiated immediately after pulse check and rhythm identification (<30 sec) AND good CPR technique AND checks pulse with CPR
Epinephrine	● Not given	● Incorrect dose ● Suboptimal route (ETT) ● Given prior to second defibrillation	● IV / IO epi dose given ● Correct dose given ● Given following second defibrillation
Defibrillation (third)	● Not done ● Attempted but electricity not delivered to patient (e.g. pads not on, etc.)	● Wrong dose ● Wrong mode ● >120 sec or >5 cycles of CPR after last shock (ie. scenario time >7:30)	● Done 120 sec or 5 cycles of CPR after last shock (ie. scenario time <7:30) AND correct dose AND correct mode
STAGE 3: ROSC – 2 minutes			
Pulse check	● Not done	● Done >60 seconds after state change (ie. Scenario time >11:00)	● Done within 60 sec of state change (ie. Scenario time <11:00)

Gruppe 5

Vurdering af teamleder og team, opdelt i faste & situationsbestemte vurderingsområder

Mayo High Performance Teamwork Scale

TABLE 1. Mayo High Performance Teamwork Scale

Use the following scale to rate the team on each dimension:

1 2
Never or rarely Inconsistently Consistently

- Please rate the team on each dimension. The team has not met extensively together, do not consistently demonstrate many of the qualities described in the scale.
- (1) A leader is clearly recognized by all team members. (9) Disagreements or conflicts among team members are addressed without a loss of situation awareness.
- (2) The team leader exercises appropriate balance between command authority and team member participation. (10) When appropriate, roles are shifted to address urgent or critical situations.
- (3) Each team member demonstrates a clear understanding of his or her role. (11) When directions are unclear, team members acknowledge their lack of understanding and ask for repetition and clarification.
- (4) The team prompts each other to attend to all significant clinical indicators throughout the procedure/intervention. (12) Team members use a "closed-loop" communication manner—statements directed at avoiding or containing errors or seeking clarification.
- (5) Team members are aware of their own activities; they verbalize their activities aloud. (13) Team members call attention to actions that they feel could cause errors or complications.
- (6) Team members repeat back or paraphrase instructions and clarifications to indicate that they heard them correctly. (14) Team members respond to potential errors or complications with procedures that avoid the error or complication.
- (7) Team members refer to established protocols and checklists for the procedure/intervention. (15) When statements directed at avoiding or containing errors or complications do not elicit a response to avoid or contain the error, team members persist in seeking a response.
- (8) All members of the team are appropriately involved and participate in the activity. (16) Team members ask each other for assistance prior to or during high workload.

Udfordring:

Tjekliste for præstation, men differentiere ikke i forskellige udførsler – samlet bedømmelse for fx Teamleder er anerkendende overfor sit team

Teamet reagerer rigtigt i forhold til kliniske situationer

Uenighed i teamet løses uden tab af situationsfornemmelsen

Konklusion:

Skemaet har for lidt patientfokus

for lidt plads til noter af enkelt-situationer

Erfaringer fra Workshoppem

Det er svært at lave ét skema til vurdering af teampræstationer, når der skal tages individuelle hensyn, udeles point/karakterer.

Det er svært at vurdere algoritmer i situationer der udvikler sig henover tid med involvering af forskellige kompetencer