ABOUT COMBAT CASUALTY CARE (3C): WHY & HOW

CIOMR focuses on high quality casualty care: we (our Governments) send our young men and women in harm's way and therefore we (the citizens) have an obligation to provide them with he best possible care if "something happens". That care starts at the point of wounding and that care is delivered at first by the buddy.

Every summer CIOMR organizes a 3C event; primarily as a training opportunity for non-medical personnel, but to make it more challenging for the participants the event is presented as a competition with a feed-back session.

The competition element necessitates certain special features. Normally in 3C training it is a matter of pass the grade / don't pass the grade, but in a competition everything must be standardized in order to have a fair playing field.

CIOMR handles that as follows.

1. Each year CIOMR's Operational Medicine Commitee (OMC) develops a draft scenario with a number of casualties
2. A list of requirements is derived from it, regarding the number of personnel, "props" and equipment, which is then discussed with that year's Host Nation
3. Depending on what the Host Nation is prepared and able to provide, and taking into account the venue for the competition, a definitive scenario is agreed upon; the casualty descriptions are subsequently finalized.
   Fig 1 is an example of such a scenario; fig 2 gives the injuries, dress instructions and play-acting of one of the casualties that go with that scenario

SCENARIO **Fig 1**

Things have gone terribly wrong in South East Europe. In a brief undeclared war the aggressor made some territorial gains but was then largely repulsed by "a coalition of the willing". The Security Council was unable to agree, after which NATO decided to put a force in the most threatened areas, as a deterrent.
An "uneasy stalemate" exists.
Your team is part of the small complement of a Forward Operating Base (FOB).Everybody wears uniform only "outside the wire"

Incursions by the opponent are constantly tried, to which NATO has decided to react by undercover actions. One such undercover team has just returned from an action (actually a sabotage mission) and is putting its equipment into storage at the FOB. At that moment an explosion has been heard.

DESCRIPTION CASUALTY "B" **Fig 2**

Condition and injuries

Condition

<c>: has almost stopped because of deep shock
A: patent
B: 28/min
C: heart rate 140/min (**only carotid** artery is palpable)
D: alert, but no interest in surroundings

Injuries

- open fracture left forearm
- considerable amount of blood lost
- ruptured eardrums, deaf

Play-acting, moulage and dress instruction

Play-acting:

- sitting
- not reacting to voice because of ruptured eardrums
- alert, but not really reacting to surroundings (deep shock)
- moaning
- grasping his forearm with a blood-soaked cloth

Moulage:

- some blood from both ears
- deadly pale and sweating
- open fracture of left forearm
- lots of blood on the ground

Dress:

- civilian

4. For each casualty a scoring sheet is then developed. Such a sheet uses a template that follows the steps for assessment and treatment as described in CIOMR's 3C source document , "Combat Casualty Care". The contents of that document are a combination of the TCCC Guidelines (US) and of JSP 570 (UK); they are in accordance with STANAG 2122.
   Fig 3 is an example

Casualty B **Fig 3**

Security

applies handcuffs (if hostile)	N/A		N/A
searches and disarms (if hostile)	N/A		N/A

Safety

disarms if mentally disturbed (own troops)	N/A		N/A
looks for additional weapons	yes	(3)	no (-6)
wears personal protection/gloves	yes	(3)	no

Primary Survey

<c> catastrophic bleeding / level of consciousness LOC / neck

checks for massive external bleeding	yes	(3)	no (-5)
stops massive external bleeding effectively (tourniquet)	yes	(3)	no (-7)
assesses LOC by addressing casualty	yes	(2)	no
immobilizes neck in blunt trauma) (gets help)	yes	(3)	no

Casualty is conscious

A checks airway

opens airway (chin lift)	yes	(2)	no
inspects mouth, cleans if necessary	yes	(2)	no
listens for passage of air (for max 10 seconds)	yes	(2)	no
- absent: in hostile environment: stops	N/A		N/A
in safe environment: considers BLS	N/A		N/A
- present: maintains airway by positioning	N/A		N/A

B checks breathing

checks respiratory rate by placing hands on chest	yes	(6)	no (-3)
checks for injuries **front** of chest	yes	(6)	no (-6)
checks for injuries **back** of chest	yes	(8)	no (-6)
covers sucking wound(s)	N/A		N/A

C checks circulation			
checks for additional bleeding/ obvious wounds	yes	(4)	no (-2)
covers wounds	yes	(5)	no (-2)
changes already applied tourniquet for dressing	N/A		N/A
checks heart rate at palpable artery	yes	(5)	no (-3)
splints obvious fractures	N/A		N/A
D checks neurological status			
determines once more Conscious vs. Unconscious	yes	(1)	no
checks pupils	yes	(3)	no (-3)
checks movement of limbs	yes	(2)	no
Secondary Survey			
performs full examination (if tactical situation permits)	yes	(4)	no
Supportive measures			
prevents hypothermia	yes	(5)	no (-3)
positions casualty	N/A		N/A
provides pain relief / comfort	yes	(3)	no (-2)
re-examines casualty	yes	(5)	no (-5)

5. Each item has been assigned a number of points, both for a “yes” and a “no”. In case of a “no” the grades range between 0 and - 8
6. Occasionally “N/A” is used . In those instances that particular item on the sheet (that comes from the standard descripton in “Combat Casualty Care”) is not valid for that particular casualty. As an example: “Disarm a casualty that isn’t fully alert” is not valid if the casualty in the scenario is wide awake.
7. We also use N/A if the item is “controversial”, i.e. not generally accepted in all NATO militaries. It would be unfair to punish a team for not doing what they aren’t allowed to do because of national regulations, by giving points to some other team for whom the same action is not prohibited. For such items the remark “follow NATIONAL guidance” is used in the “Combat Casualty Care” booklet
8. If it’s almost impossible for a Judge to see whether an item has been checked, we will also use N/A (as an example: the patency of the airway in a normally breathing casualty, who has no abnormal breathing sounds)

9. The exact number of points per item is the result of discussions between experienced military physicians in OMC. They take into account: the actual condition/abnormality, the importance of that condition/abnormality for that particular casualty and occasionally the needs of other casualties; all against the background of the tactical situation (scenario)
10. As a consequence the same item will not always be assigned the same number of points in all casualties

11. During the competition each item on the sheet is ticked by a Judge; either as “observed” (yes) or “not observed” (no). Each casualty has a separate Judge
12. Separate scoring is done on team work and (optionally) on radio traffic
13. All points that have been obtained by the team (for teamwork, casualty treatment and possibly radio traffic) are added up; the “team totals” decide which team winst he competition

14. The competition is usually run in 4 to 8 parallel lanes. As a consequence there are 4 to 8 casualties “A”, the same number of casualties “B” etc. By using the system described above CIOMR assures that the interobserver variability between the Judges who assess the performance on respectively all casualties “A”, “B” etc is kept to a minimum
15. For an effective learning experience feed-back is indispensible. This is provided immediately after the competition or in electronic format (see 16.)
16. As of 2015 CIOMR sends a copy of each team’s computerized results to that team (Fig 4 is an example); thereby showing what was expected and what was actually done (for each casualty and as a team)

Team Utopia 3	**Max**	**Obtained**	**Fig 4**
Casualty "B"	**80**	**77**	
Security			
applies handcuffs (if hostile)	n/a	n/a	
searches and disarms (if hostile)	n/a	n/a	
Safety			
disarms if mentally disturbed (own troops)	n/a	n/a	
looks for and finds additional weapons	3	3	
wears personal protection	3	3	
<c> / LOC / neck			
checks for massive external bleeding	3	3	
stops massive external bleeding effectively (tourniquet)	3	3	

assesses LOC by addressing casualty	2	2
Immobilizes neck in blunt trauma (gets help)	3	0
Airway		
opens airway (chin lift)	2	2
inspects mounth, cleans if necessary	2	2
listens for passage of air (for max 10 seconds)	2	2
- absent: in hostile environment : stops	n/a	n/a
in safe environment : considers BLS	n/a	n/a
- present: maintains airway by positioning	n/a	n/a
Breathing		
checks respiratory rate by placing hands on chest	6	6
checks for injuries front of chest	6	6
checks for injuries back of chest	8	8
covers sucking wound(s)	n/a	n/a
Circulation		
checks for additional bleeding / obvious wounds	4	4
covers wound(s)	5	5
changes already applied tourniquet for dressing	n/a	n/a
checks heart rate at palpable artery	5	5
splints obvious fractures	n/a	n/a
Disability (neurological status)		
determines once more conscious vs. Unconscious	1	1
checks pupils	3	3
checks movement of limbs	2	2
Secondary Survey		
performs full examination (if tactical situation permits)	4	4
Supportive Measures		
prevents hypothermia	5	5
positions casualty	n/a	n/a
provides pain relief / comfort	3	3
re-examines casualty	5	5

17. As of 2017 individual participants will have an opportunity to obtain a Certificate of Profiency. As a result the Competion will change slighty:
    * each team member will have to take care of 1 casualty; the team leader included
    * it will not be allowed that a casualty is cared for by several team members in sequence
    * while care is being delivered team members are not tos peak toe ach other
    * all casualties will be comparable as regards the severity of their injuries
    * in each scoring sheet a number of items will be marked as Critical Treatment Decision (CTD; red shading) or Important Treatment Decision (ITD; blue shading) The “red items” are considered essential for the survival of that particular casualty and must therefore be dealt with correctly and in the right sequence; i.e. in order to obtain the Certificate red items may not be missed. Blue items are important but not a matter of life or death. One or two may be missed therefore. All items follow the c-ABCDE approach that has been described in the “Combat Casualty Care Manual”.
      Which items in the scoring list will be considered “red” and which “blue” differs from casualty to casualty and depends on the injuries of that casualty (the scoring lists above are just an example)
18. If a participant doesn’t make the grade for the Certificate, the points he/she has obtained will still be added to his/her team’s total

CIOMR takes Combat Casualty Care very seriously!