JOINT TRAUMA SYSTEM CLINICAL PRACTICE GUIDELINE (JTS CPG)



Documentation in Prolonged Field Care (CPG ID:72)

This CPG is meant to provide medical professionals who treat severely injured or sick patients in austere environments with recommendations for documentation that will allow them and subsequent providers along the evacuation chain to optimally manage complex, often unstable casualties.

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INTRODUCTION

This Role 1, prolonged field care (PFC) Clinical Practice Guideline (CPG) is intended to be used after Tactical Combat Casualty Care (TCCC) guidelines when evacuation to higher level of care is not immediately possible. A provider of PFC must first and foremost be an expert in TCCC. This CPG is meant to provide medical professionals who treat severely injured or sick patients in austere environments with recommendations for documentation that will allow them and subsequent providers along the evacuation chain to optimally manage complex, often unstable casualties. Recommendations follow a "minimum," "better," "best" format that provides alternate methods when optimal hospital options are unavailable.

BACKGROUND

PFC frequently involves the care of complicated, critically injured or sick casualties who are normally managed in medical treatment facilities. For patients that survive the initial trauma or sickness, the biggest risk of death is from circulatory shock and its complications. All severely injured and sick patients must be closely monitored for signs of shock and decompensation because the best treatment for shock is early recognition, treatment of the cause, and resuscitation. One method used by intensive care units to monitor critical patients is trending vital signs, physical exams, and fluid outputs recorded on a flowsheet that facilitates recognition of changes that could mark the early signs of decompensation.

In the PFC environment, one of the few techniques available to the medical provider that is identical to those used in hospitals is documentation of key clinical trends. It is critical that Medics are trained on the interpretation of clinical trends. It is also essential that Medics cross-train nonmedical teammates to take and record vital signs, outputs, key exam findings, and interventions to free the medic to do other tasks as well as to sleep if care of the casualty is especially prolonged.

Documentation that can help the medic and successive caregivers manage complicated patients includes:

- TCCC Card, DD1380
- PFC flowsheet
- Telemedicine guide
- Handoff report

Finally, completion of the PFC after-action report (AAR) will contribute greatly to performance improvement to develop training, tools, and techniques for improving the care of casualties in austere environments.

PATIENT DEMOGRAPHICS

While some casualties will be unable to provide name, identification number, date of birth (DOB), or other identifying information, every effort should be made to collect and document this information in order to facilitate the inclusion of prehospital documentation into the patient's medical record. This information not only helps the longitudinal care of casualties as they progress through the evacuation chain, it also provides the vital link to connect prehospital treatments delivered to survival and long-term outcomes in order to guide recommendations for improving trauma care.

NOTE: Medical treatment facilities use pseudo names assigned when a patient's real name is unknown. In such cases, every effort should be made to continue the same pseudo name through transfers of care. Prehospital documentation submitted after patient transfer, to include AARs, should use the same name or pseudo name assigned at the first treating MTF.

DOCUMENTATION OF PREHOSPITAL CARE

GOALS

- Transmit important medical information to the next level of care
- Permanently record information vital to service members injured in combat
- Contribute to performance improvement in prehospital care.

Minimum: TCCC Card DD1380

- The DD1380 is organized as a MIST (Mechanism, Injuries, Signs and Symptoms, Treatments) report (Appendix A).
- Note the time casualty is received and include time of injury (if known and different from when received) and time of all key interventions (e.g., tourniquet, blood transfusion, tranexamic acid [TXA] dosing).
- List injuries and annotate on the diagram. Tourniquets and tourniquet times are also annotated on the diagram.
- Vital signs, including mental status AVPU (alert or responsive to voice, pain, or unresponsive) and pain scale, should be recorded to the greatest extent possible—up to four sets of vital signs can be recorded on the TCCC card.
- Document treatments to include external hemorrhage control, airway, breathing, fluids, medications, and other interventions on the reverse side of the TCCC card.

Better: PFC Flowsheet

As a follow-on to the TCCC card, the PFC flowsheet is used to document trends over time and is the most useful tool to recognize important clinical changes in complex casualties such as decompensation, response to resuscitation, development of complications, effectiveness of medications, etc. The PFC flowsheet is one of the most effective ways to improve the level of care provided in PFC situations.

- When prehospital care transitions to PFC, documentation should transition from the TCCC card to the PFC flowsheet. There is no exact time for this transition to occur; however, once all of the available time blocks on the TCCC card are filled and evacuation to higher level of care is not imminent, then documentation can transition to the PFC flowsheet (Appendix B).
- The PFC flowsheet not only serves to document care and identify trends but also contains a checklist of interventions that may be needed through the included patient care and nursing care checklists. Such checklists can greatly aid task-saturated, fatigued Medics by providing a quick point of reference for important tasks that should be performed regularly to improve care and reduce the risk of complications to their patients.

- The PFC flowsheet also includes:
 - Vital signs
 - Fluid input and output
 - Medication times, route, dose
 - Physical exam findings
 - Problem list
 - Treatment plan
 - Telemedicine call script

Best: AAR

- An AAR should be completed after patient handoff. In addition to the TCCC card and PFC flowsheet, a structured AAR is used to collect lessons learned and improve care. In cases where documentation is not able to be completed before patient handoff or was lost after handoff, the AAR can also serve as a supplement to the medical record.
- TCCC and PFC AARs are available at http://jts.amedd.army.mil/index.cfm/documents/forms after action
- TCCC or PFC AARs, along with any medical documentation not completed before patient handoff, should be completed within 24 hours of patient handoff and summited to the Joint Trauma System (JTS) prehospital organizational email box: usarmy.jbsa.medcom-aisr.list.jts-prehospital@mail.mil
- The unclassified medical AAR should be accomplished in addition to unit-required classified AARs.

TELEMEDICINE GUIDE

GOAL

Goal: Facilitate communication between prehospital provider and telemedicine consultant.

Rehearsal of telemedicine consultation between prehospital providers and remote physician consultants has shown that communication is optimized when the caller completes a telemedicine guide or script before calling the consultant and uses it during the consultation. In addition to transmit- ting medical information to the consultant, it is important for the caller to provide information about the care context and a summary of capabilities currently available. An image of the casualty and an image of the care environment are helpful for remote consultants to understand the operational constraints faced by the local caregiver. Capabilities that are important to convey to remote consultants may include the training level of the provider, available medications, medical supplies, monitoring, ultrasound, etc. Reading or sending a photograph of a written capabilities list will more quickly orient the consultant to the operational environment of the caller and reduce time spent asking the caller for items that are not available. If urgent teleconsultation is needed, do not delay calling to fill out a guide sheet or send e-mails. For additional details, see Teleconsultation in prolonged field care position paper.¹

Minimum: Read from TCCC card.

Better: Use telemedicine report incorporated in the PFC flowsheet.

Best: Use the Virtual Critical Care Consultation guide (Appendix C) and send a picture of casualty, capabilities, and vital sign trends to the consultant via email or text using appropriate operational security and protections of patient privacy.

HANDOFF REPORT

GOAL

Goal: Ensure safe transition to the next level of care.

Adverse events may occur due to poor handover of a patient from one level of care to another. The PFC provider's job is not done until the receiving team understands the patient's condition and can begin to manage the patient appropriately.

Summarize in organized format:

- 1. Overall condition of the patient: stable or unstable; better, same, or worse.
- 2. Mechanism of injury or illness
- 3. Injury(ies), current physical exam
- 4. Vital signs to include trends and urine output
- 5. Treatments (procedures, dressings, airway management, fluids, blood products, medications)

Minimum: Written handoff report that follows the MIST format (e.g., TCCC Card).

Better: Add the PFC flowsheet.

Best: Add a dedicated handoff sheet (e.g., SBAR handoff report2, PFC handoff report3).

ELECTRONIC DOCUMENTATION

Electronic documentation is the standard in hospitals and advanced field medical facilities. Devices such as the Tempus Pro (Remote Diagnostic Technologies LTD, United Kingdom) and BATDOK (USAF, 711 Human Performance Wing, OH) are devices designed for the operational environment that can compile detailed patient records that support many of the recommendations in this CPG. These and other similar devices and applications may improve the accuracy of patient records, reduce the burden of data entry for the prehospital provider, and provide other features to improve patient care such as critical value alarms and telemedicine communication. Where such devices are fielded and supported with network connectivity, their use for austere PFC environments is encouraged.

JTS hosts a variety of fillable forms at http://jts.amedd.army.mil/index.cfm/documents/forms after action

REFERENCES

- 1. Vasios W, Pamplin JC, Powell D, et al. Teleconsultation in prolonged field care. J Spec Oper Med. 2017:17(3);141–144.
- 2. Air Force Instruction 48-307, Volume 1, En Route Care and Aeromedical evacuation Medical Operations, 9 Jan 2017. http://static.e-publishing.af.mil/production/1/af_sg/publication/afi48-307v1/afi48-307v1.pdf Accessed 28 Dec 2017.
- 3. Prolonged Care MTF Handover Sheet. https://prolongedfieldcare.org Accessed 28 Dec 2017.

APPENDIX A: TACTICAL COMBAT CASUALTY CARE CARD, DD 1380

TACTICAL COMB	AT CASU	ALTY CAP	RE (TCCC) CARD		BATTLE	ROSTER #:					
BATTLE ROS	TER #:					EVA	C: Urgent Pr	iority 🗌 Ro	utine			
EVAC:	Urgent 🗌	Priority 🔲	Routine		Tre	atments: (X all tha	nk)	Туре				
								☐Junctional ☐ Truncal				
GENDER: M F DATI	E (DD-MMM-YY):		TIME:			Dressing-□ Her	nostatic 🗌 Pressur	e 🗌 Other				
SERVICE:UNIT	:	AL	LERGIES:		A:	□Intact □ NPA	□CRIC □ET-Tube	□SGA				
Mechanism of Injury: ()					В:	□O2 □ Needle	-D □ Chest-Tube □	Chest-Seal				
☐ Artillery ☐ Blunt ☐ Landmine ☐ MVC			enade 🗌 G	SW IED	C:		Name	Volume	Route	Time		
Injury: (Mark injuries with an	X)					Fluid			•			
TQ: R Arm	4.5	TQ: L Arn	n ('	4.5					•			
TYPE:		TYPE:				Blood			▼			
TIME:		TIME:	برسم 🖃	1		Product			•			
M.	18		1	18	ME	DS:	Name	Dose	Route	Time		
LET .	177		12/			Analgesic			▼			
45	1		MIS	176		(e.g., Ketamine, Fentanyl,			•			
	1	λ	4.5	1 (4.5		Morphine)			•			
and	W P	l _o				Antibiotic (e.g., Moxifloxacin,			▼			
	.YY. 7		\ /			Ertapenem)			■			
	y Kel			/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		Other			•			
TQ: R Leg	(((((((((((((((((((TQ: L Leg	j (_	()		(e.g., TXA)			▾			
TYPE:		TYPE:	- M	\ <i>\</i> .\\	ОТ	HER: □ Comba	t-Pill-Pack ☐ Eye-S	Shield (□R	□L) □S	plint		
TIME:		I IMIC.		3 2 3		☐ Hypothermia	-Prevention Type:					
Signs & Symptoms: (Fill	in the blank)			_	NOT	ES:						
Time												
Pulse (Rate & Location)												
Blood Pressure	/	/	/	1								
Respiratory Rate												
Pulse Ox % O2 Sat												
AVPU	•	•	•	•	FIRS	T RESPONDER						
Pain Scale (0-10)	•	•	•	•		E (Last, First):			LAST 4:			
DD Form 1380, JUN 2014			T	CCC CARD	DD F	orm 1380, JUN 2	2014 (Back)		TC	CC CARD		

APPENDIX B: PROLONGED FIELD CARE FLOWSHEET -PAGE 1 (Newest Version Available at Prolongedfieldcare.org)

Day																		D	Checklist	
Hour																		Н	Reassess Tx	
Minute																		М	Expose	
																			Detailed Exam	
	200																	200	Send MIST Report	
	190																	190	Monitors	
	180																	180	2nd IV/IO	\perp
	170 160			 	!													170 160	GCS/Neuro/MACE	+
-	150												-					150	Analgesia Sedation	+-+
ВР	140												1					140	NG / OG	+-+
Systolic V	130																	130	Upgrade Airway	\vdash
Diastolic ^	120																	120	Post Cric Checklist	\vdash
	110																	110	Vent w/ PEEP	
Temp X	100																	100	Hypothermia Tx	
	95																	95	Recalc TBSA & Fluids	
SPO2 ◊	90																	90	Ultrasound eFast	
	85																	85	Fluid Challenge	
	80																	80	1st TXA dose (<3hrs)	
Pulse ●	75 70												-					75 70	Blood Type Card	+-+
ΜΑΡ Δ	65		1			 							1		 		 	65	FWB Transfusion Convert TQ <4hrs	+
10001 11	60		1	1	1	1	1						1		1		1	60	Foley/Bladder Tap	\vdash
	55																	55	Adjust Vent Settings	
	50		1															50	UA Dipstick	
	45																	45	Clear C-Spine	
ETCO2 •	40																	40	Position Pad Patient	
	35																	35	Peripheral Pulses	
																			Compartment	1 1
	30								 									30	Syndrome	
	25 20																	25 20	Escharotomy	++
	15																	15	Reduce / Splint Fx DVT Prophylaxis	+
Respirations 0	13																	13	Antibiotic War	+-
	10																	10	Wound Tx]
	5																	5	Tetanus	
	0																	0	Teleconsult	
	No read																	No read	Labs	
Output																			X-Ray / Imaging	
Fluid Input																			PreOp Eval	
Pain scale/RAS																			Debridement	
AVPU/Neuro/M/	ACE																			
Fue response	,																		Nursing Care	
Eye response Oral Response	<u>4</u>																		Reminders Vitals q1h	-
Motor Response	6																		Flush Saline Locks	+
GCS Total	15																		Suction ET Tube	+
Drug/Intervention:	Dose:																		Reposition q2hrs	\vdash
																			(30° Each side)	1 /
																			Change Blood Tube	
																			q4hrs	igsquare
Drug/Intervention:	Dose:																		Oral Care / Hygeine	1 1
																			q4hrs	
D //													ļ						Foley Care q4hrs	
Drug/Intervention:	Dose:																		Sponge Bath q8hrs	+
																			Change IV Bag q24hrs	1 1
Drug/Intervention:	Dose:												1						Change Foley Cath	+-
Drug/micrvention.	Dose.																		q72hrs	1 1
																			Change IV Lines	
				<u> </u>	<u> </u>					<u> </u>	L				L				Change IV Lines q72hrs	<u> </u>
Drug/Intervention:	Dose:																		Change HME q72hrs	
Drug/Intervention:	Dose:				1															لــــــــــــــــــــــــــــــــــــــ
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Drug/Intervention:	Dose:												 <u> </u>	 						+
Drug/Intervention:	Dose	l																		

PROLONGED FIELD CARE FLOWSHEET PAGE 2

Name:		Date:	Time:		Bloc	od type:		EVAC Category:	
S:							ſ	иоі	
	(3	$\frac{1}{2}$	$\left\{3\frac{1}{2}\right\}$						
A:		\nearrow		`		Injuries / illness / prob	olems	Treatment plan	
	2 13	$\binom{2}{2}$	2 13	2	1				
M:	11/2	$1\frac{1}{2}$ $1\frac{1}{2}$	1	11/2	2				
P:	$\begin{pmatrix} 1 \\ 4\frac{3}{4} \end{pmatrix}$		$\left(2^{\frac{1}{2}} \left[2^{\frac{1}{2}}\right]\right)$	13 4 4 4	3				
Ŀ			$\begin{array}{c c} & & & & & & & & & & & & & & & & & & &$		4				
E:	$3\frac{1}{2}$	$\left\langle 3\frac{1}{2}\right\rangle$	$3\frac{1}{2}$ $3\frac{1}{2}$		5				
E:	13	13	1 ³ / ₄ (1 ³ / ₄)		6				
TQ 1 time on:		TQ 2 time on:		TQ 3 time	on:		TQ 4 time on:		TXA Dose 1 on:
TQ 1 Converted:		TQ 2 Converted:		TQ 3 Conv	erted	:	TQ 4 Converted:		TXA Dose 2 on:
Notes:								Telemedicine	Call Script
							Complaint_ History_ Vitals HR RR_ Pulse Ox UOP		and I need Chief
							Exam Findings		
							Fluids/Meds		

APPENDIX C: VIRTUAL CRITICAL CARE CONSULTATION GUIDE

1. Before calling, E-mail image of the casualty (wounds, environment, etc.), "capabilities" (back of page), & vital signs trends to											
2. If call not answered: a) call next number on PACE or call back in 5 – 10 min.											
3. If unable to provide information due to operational security, state so.											
P:											
A:											
C: E:											
This is		I am a (job,	/ position) _								
My best contact info is:											
YOUR best contact info is (Consulta											
**	* PAUSE POII	NT to <mark>CONFIR</mark>	RM CONTACT	TINFO***							
I have a year–old(se	x)	(active du	ıty/foreign n	ational/OGA	A,etc.), who has	the following:					
Mechanism of Injury or known diag	gnosis(es)		that o	ccurred in (lo	ocation)						
The injury/start of care occurred	hour.	s ago. Anticij	pated <i>evacud</i>	ation time is	(range)						
Injuries/Problems/Symptoms:											
Treatments:											
He/she is currently (circle) stable/ u	unstable, gett	ting better/ g	etting worse	/ getting wo	rse rapidly						
Known Medication Allergies/Past n	nedical/Surgio	cal history is:									
I need help with (be specific if possible	, i.e. "I need h	elp reading thi	is ECG," or "I r	need help sta	bilizing this patier	nt," etc.)					
Other Consultants have recommen	ded:										
*** PAUSE POI	NT for Remo	te Consultani	t to ask clari	fication que	stions ***						
VITALS (current & trend as of): HR	ВР	RR	SpO2	EtCO ₂	Temp					
UOP(ml/hr)	over		(# hours) I	Mental Statu	ıs (GCS/ AVPU)						
EXAM: Neuro			Ext/ MSK								
Heart			Pulses								
Lungs			Skin/ Wour	nds							
Abd											
LABS: ABG:	Lact	tate:	Ot	her:							

^{***} PAUSE POINT for Remote Consultant to ask clarification questions **

VIRTUAL CRITICAL CARE CONSULTATION GUIDE PAGE 2

Plans/Recom	mendations								
PRIORITY	SYSTEM/PRO	DBLEM	RECOMMENDATIO)N					
	Neuro or pro	blem #1							
	CV or proble	m #2							
	Pulm or prob	olem #3							
	GI or probler	n #4							
	Renal or pro	blem #5							
	Endocrine or	problem #6							
	MSK/ Wound	d or problem #	7						
-	Tubes, lines,	drains or prob	lem #8						
	Prophylaxis/	prevention or	prob#9						
	Other								
TO-DO/ FOLLO	OW-UP/TO-9	ТОР	NOTES						
1.									
2.									
3.									
4.									
5.									
6.									
	PAUSE PO	INT, for <mark>Med</mark>	ic/Local Caregiver	to ask clarificat	tion questions/READ	DBACK***			
Available	"kit" (supplie	s, equipment, n	nedications) !! IF POSS	IBLE PHOTOGRAPH	AND SEND VIA EMAIL E	BEFORE CALLING !!			
IV access:	IV	Central line	IO (location)	Other:					
Monitor:	Propaq	Tempus	•		al PulseOx only	Exam Only			
Commo:	-		THIAB:	SA	T#Local C	ell#			
		C Address	\(C_= C						
IV/ Fluide	-	_	VSee, Skype, etc.):_	20/ cali	no Othor				
IV Fluids: Colloids:	Plasma-l Hetastar	•	Normal Saline	3% sali	ne Other:				
Blood product			_		Platelets Ot	her:			
Medications:		ics: name/rout		121	riaciets of				
		ie IV/ PO		pioid (name/ IV/	PO):				
	=	IV/ PO (pop)	Ketami		,				
	Midazolam Diazepam (IV/ PO)								
	TXA):					
Airway supplie Misc:	es: ETT	Cric kit LM	IA Ventilator	BVM	O2 Suction				