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.

Contributors

Paul Loos, 18D Erik Glassman, MS, NRP Dan Doerr, 18D (Ret) Roger Dail, 18D Jeremy Pamplin, MD Douglas Powell, MD Jamie Riesberg, MD Sean Keenan, MD Stacy Shackelford, MD

Publication Date: 13 Nov 2018

TABLE OF CONTENTS

Introduction	2
Background	
Patient Demographics	
Documentation of Prehospital Care	
Telemedicine Guide	
Handoff Report	5
Electronic Documentation	5
References	6
Appendix A: Tactical Combat Casualty Care Card, DD 1380	7
Appendix B: Prolonged Field Care Flowsheet	
Appendix C: Virtual Critical Care Consultation Guide	

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 https://jts.health.mil/index.cfm/PI_CPGs/cpgs
- TCCC or PFC AARs, along with any medical documentation not completed before patient handoff, should be completed within 24 hours of patient handoff and summitted to the Joint Trauma System (JTS) prehospital organizational email box: dha.jbsa.healthcare-ops.list.jts-prehospital@health.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 https://jts.health.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.
- 3. Prolonged Care MTF Handover Sheet. https://prolongedfieldcare.org Accessed 28 Dec 2017.

APPENDIX A: TACTICAL COMBAT CASUALTY CARE CARD, DD 1380

TACTICAL COMBAT C		ARE (TCCC	C) CARD	BATTLE ROSTER #:								
BATTLE ROSTER	#: Priority	□ Poutino	-		: Urgent 🗆 P							
NAME (Last, First): SEX: M F DATE (DD-MMM-) SERVICE: UNIT:	m:	LAST 4		Treatments: (x all that C: TQ- □Extremity Dressing-□Hemo	Туре							
Mechanism of Injury: (x all the	at apply) urn Fall			A: ☐Intact ☐ NPA ☐ B: ☐O2 ☐ Needle-D C: ☐			Route	Time				
Injury: (Mark injuries with an X)	10.			Fluid			•					
TQ: R Arm TYPE: TIME:	TQ: L /	Arm		Blood Product			•					
H.	67	-10	11/4	MEDS:	Name	Dose	Route	Time				
LA THE		M	Like	Analgesic			•					
/ / / / / / / / / / / / / / / / / /	10)	67}	1678	(e.g., Ketamine, Fentanyl,			•					
ES MI	137	ans (1 1 m	Morphine)			•					
700	1012,	7991	168g	Antibiotic (e.g., Moxifloxacin.			▣					
\ ,\/.	/	1		Ertapenem)			▣					
TQ: RLeg	TQ: L	Leg	13	Other (e.g., TXA)		-	•					
TYPE:	TYPE:		Jel 1	OTHER: Combat-			_L) _S	plint				
Signs & Symptoms: (Fill in the	blank)			NOTES:								
Time Pulse (Rate & Location)												
STATE OF THE PROPERTY OF THE P	1 1	,	1									
Respiratory Rate												
Pulse Ox % O2 Sat	-											
AVPU	•	•		FIRST RESPONDER								
Pain Scale (0-10)		• •		NAME (Last, First):			LAST 4:					
DD Form 1380, JUN 2014	and the same of th		TCCC CARD	DD Form 1380, JUN 20	14 (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																						M	Expose	
																							Detailed Exam	
	200																					200	Send MIST Report	
	190																					190	Monitors	
	180			ļ																		180	2nd IV/IO	\perp
	170 160							-										1			ļ	170 160	GCS/Neuro/MACE	+
-	150			-	-																	150	Analgesia Sedation	+-+
ВР	140			1	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 FWB Transfusion	++
ΜΑΡ Δ	65			1	1																	65	Convert TQ <4hrs	+-+
	60			t	1	1		1							1	1	1	1	1		1	60	Foley/Bladder Tap	\vdash
	55	1	1	1	1	1	1	1			1				1	t	1	1	1		1	55	Adjust Vent Settings	\vdash
	50			Ì												1						50	UA Dipstick	
	45																					45	Clear C-Spine	
ETCO2 •	40																					40	Position Pad Patient	
	35																					35	Peripheral Pulses	
	20																					20	Compartment	1 1
	30 25							-										1			ļ	30 25	Syndrome	+
	20																					20	Escharotomy Reduce / Splint Fx	+
	15																					15	DVT Prophylaxis	+-+
Respirations O	13																					13	Antibiotic War	\vdash
	10																					10	Wound Tx]
	5																					5	Tetanus	
	0																					0	Teleconsult	
	No read																					No read	Labs	
Output				ļ		-																	X-Ray / Imaging	
Fluid Input																							PreOp Eval	
Pain scale/RAS																							Debridement	\perp
AVPU/Neuro/M	ACE			<u> </u>		ļ																		
Evo rosponso	4																						Nursing Care Reminders	
Eye response Oral Response	5			1											1								Vitals q1h	+
Motor Response	6																						Flush Saline Locks	+
GCS Total	15																						Suction ET Tube	\vdash
Drug/Intervention:	Dose:			1																			Reposition q2hrs	\Box
J																							(30° Each side)	
																							Change Blood Tube	
																							q4hrs	
Drug/Intervention:	Dose:																						Oral Care / Hygeine]
																							q4hrs	+-+
Drug/Intervention:	Docor			-	-																		Foley Care q4hrs Sponge Bath q8hrs	+-+
Drug/Intervention:	Dose:																						Change IV Bag	+
																							q24hrs]
Drug/Intervention:	Dose:			1	<u> </u>																		Change Foley Cath	\vdash
20,																							q72hrs	
																							Change IV Lines q72hrs	
		 																<u> </u>			<u> </u>		q72hrs	oxdot
Drug/Intervention:	Dose:																						Change HME q72hrs	$ldsymbol{\sqcup}$
																								igspace
Drug/Intervention:	Dose:																							+
D //		 	!	 	 	!					!			.	 			1			1			+
Drug/Intervention:	Dose:			!	!							-			-			1			1			+-
Drug/Intervention:	Dose	 <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			<u> </u>	l	<u> </u>		<u> </u>		 <u> </u>						 1	l		لـــــــا

PROLONGED FIELD CARE FLOWSHEET PAGE 2

Name:		Date:	Time:		Bloc	od type:		EVAC Category:	
S:							ſ	иоі	
	(3	$\frac{1}{2}$	$\left\{\begin{array}{c}3_{\frac{1}{2}}\\1\end{array}\right\}$						
A:		\nearrow		`		Injuries / illness / prob	olems	Treatment plan	
	2 13	$\binom{2}{2}$	2 13	2	1				
M:	1½	$1\frac{1}{2}$ $1\frac{1}{2}$	1	11/2	2				
P:	$\begin{pmatrix} 1 \\ 4\frac{3}{4} \end{pmatrix}$		$\left(2^{\frac{1}{2}} \left[2^{\frac{1}{2}}\right]\right)$	34	3				
Ŀ			43/4/4/		4				
E:	3½	$\left\langle 3\frac{1}{2}\right\rangle$	$3\frac{1}{2}$ $3\frac{1}{2}$		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		and I need Chief
							Recommendations		
							Interventions Red Flags		

APPENDIX C: VIRTUAL CRITICAL CARE CONSULTATION GUIDE

1. Before calling, E-mail image of the signs trends to	he casualty (w	ounds, envi	ronment, e	etc.), "capabil	ities" (back of pa	ge), & vital
2. If call not answered: a) call nex	t number on P	ACE or call b	ack in 5 –	10 min.		
3. If unable to provide information	due to operat	ional securi	ty, state so).		
P:						
A:						
C: E:						
This is		I am a (job/	position) _			
My best contact info is:						
YOUR best contact info is (Consulta	int's number):			_Alternate e-r	nail:	
	* PAUSE POINT					
I have a year–old(se	x)	_ (active du	ty/foreign r	national/OGA	etc.), who has th	e following:
M echanism of Injury or known diag	nosis(es)		that c	occurred in (lo	ocation)	
The injury/start of care occurred	hours o	ago. Anticip	ated <i>evacu</i>	iation time is	(range)	
Injuries/Problems/ S ymptoms:						
Treatments:						
He/she is currently (circle) stable/ u	ınstable, gettin	g better/ ge	tting worse	e/ getting wo	rse rapidly	
Known Medication Allergies/Past m	nedical/Surgica	l history is:				
I need help with (be specific if possible	, i.e. "I need help	o reading this	ECG," or "I	need help stak	oilizing this patient,	" etc.)
Other Consultants have recommend	ded:					
*** PAUSE POI	NT for <mark>Remote</mark>	Consultant	to ask clar	ification ques	stions ***	
VITALS (current & trend as of): HR E	3P	RR	SpO2	EtCO ₂	Temp
UOP(ml/hr)	over		(# hours)	Mental Statu	s (GCS/ AVPU)	
EXAM: Neuro			Ext/ MSK			
Heart			Pulses			
Lungs			Skin/ Wou	nds		
Abd						
LABS: ABG:	Lacta	te:	0	ther:		

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

VIRTUAL CRITICAL CARE CONSULTATION GUIDE PAGE 2

Plans/Recor	mmendation	s					
PRIORITY	SYSTEM/PI	ROBLEM	RECOMMENDATION	ON			
	Neuro or p	roblem #1					
	CV or probl	em #2					
	Pulm or pro	oblem #3					
	GI or probl	em #4					
	Renal or pr	oblem #5					
	Endocrine o	or problem #6	5				
	MSK/ Wou	nd or problem	n #7				
	Tubes, line	s, drains or pr	oblem #8				
	Prophylaxis	/prevention o	or prob#9				
	Other						
TO-DO/ FOL	LOW-UP/TO	-STOP	NOTES				
1.							
2.							
3.							
4.							
5.							
6.							
			edic/Local Caregive				
			t, medications) !! IF POS			ID VIA EMAIL BE	FORE CALLING !!
IV access:	IV Doggan	Central lin	` ,				
Monitor:	Propaq Other:	Tempus	Foley			uiseOx only 	Exam Only
Commo:	Tempu	s i2i ID:	THIAB:	S	AT#	Local Ce	ll#
		_	ie, VSee, Skype, etc.):_				
IV Fluids:	Plasma	-		3% sa	ıline	Other:	
Colloids:	Hetasta				Dlatala		
Blood produ Medications		blood PR tics: name/ro		FDP	Platele	ts Oth	er:
Wicalcations		ine IV/ PO	<u> </u>	opioid (name/ IV	/ PO):		
	•	yl IV/ PO (pop			,,		
	Midazo TXA			am (IV/ PO) s):			
Airway supp		Cric kit l	LMA Ventilator	BVM	02	Suction	
Misc:							

APPENDIX D: ADDITIONAL INFORMATION REGARDING OFF-LABEL USES IN CPGS

PURPOSE

The purpose of this Appendix is to ensure an understanding of DoD policy and practice regarding inclusion in CPGs of "off-label" uses of U.S. Food and Drug Administration (FDA)—approved products. This applies to off-label uses with patients who are armed forces members.

BACKGROUND

Unapproved (i.e. "off-label") uses of FDA-approved products are extremely common in American medicine and are usually not subject to any special regulations. However, under Federal law, in some circumstances, unapproved uses of approved drugs are subject to FDA regulations governing "investigational new drugs." These circumstances include such uses as part of clinical trials, and in the military context, command required, unapproved uses. Some command requested unapproved uses may also be subject to special regulations.

ADDITIONAL INFORMATION REGARDING OFF-LABEL USES IN CPGS

The inclusion in CPGs of off-label uses is not a clinical trial, nor is it a command request or requirement. Further, it does not imply that the Military Health System requires that use by DoD health care practitioners or considers it to be the "standard of care." Rather, the inclusion in CPGs of off-label uses is to inform the clinical judgment of the responsible health care practitioner by providing information regarding potential risks and benefits of treatment alternatives. The decision is for the clinical judgment of the responsible health care practitioner within the practitioner-patient relationship.

ADDITIONAL PROCEDURES

Balanced Discussion

Consistent with this purpose, CPG discussions of off-label uses specifically state that they are uses not approved by the FDA. Further, such discussions are balanced in the presentation of appropriate clinical study data, including any such data that suggest caution in the use of the product and specifically including any FDA-issued warnings.

Quality Assurance Monitoring

With respect to such off-label uses, DoD procedure is to maintain a regular system of quality assurance monitoring of outcomes and known potential adverse events. For this reason, the importance of accurate clinical records is underscored.

Information to Patients

Good clinical practice includes the provision of appropriate information to patients. Each CPG discussing an unusual off-label use will address the issue of information to patients. When practicable, consideration will be given to including in an appendix an appropriate information sheet for distribution to patients, whether before or after use of the product. Information to patients should address in plain language: a) that the use is not approved by the FDA; b) the reasons why a DoD health care practitioner would decide to use the product for this purpose; and c) the potential risks associated with such use.