The goal of this Clinical Practice Guideline (CPG) is to introduce a standardized patient record that is used to help the independent prehospital provider guide medical treatments and communicate vital patient data, interventions, and observations to the next levels of care. Patient documentation is a valid and essential aspect of excellent patient care. Additionally, the need for accurate and robust documentation while caring for a patient over an extended period of time has been proved through exercises, scenarios, and incidents. Use of a validated documentation flowsheet has proved to be one of the easiest and most effective ways to increase the level of care provided in prolonged care situations. Despite this, many Medics place themselves and their patients at a disadvantage by attempting to improvise documentation using cardboard, multiple strips of tape, or even writing on the wall or the patient while in a crisis situation in order to document important information over long periods of time.

While these improvised techniques may be sufficient for minimal interventions or over short periods of time, this practice can be dangerous and deleterious during management of critically injured patients. Such treatment situations, involving multiple drugs and interventions being completed and not adequately annotated over multiple legs of an evacuation chain, can absolutely put the patient at risk and increase both morbidity and mortality. In contrast, any Medic can instantly improve the standard of care they provide through the use of an organized and efficient flowsheet.

The prolonged field care (PFC) documentation tool, modeled after best practices in current intensive care units and incorporating accepted field documentation solutions, was designed to capture critical information as well as to provide lists of critical actions and scripts needed for accurate communication. Through many hours of consulting, editing, revising, and, most importantly, field testing, the PFC Working Group has agreed on certain attributes that a single patient care document should contain for the purpose of prolonged field care. The format presented in this CPG has been tested and validated by both Medics and Role 1 providers as well as by hospital-based consultants, and it incorporates documentation best practices. It is imperative that the documentation form is trained and practiced before an actual patient care situation.

Do not assume that the next level of care will just throw away the documentation, making your efforts futile. However, it is true that casualty cards and documents may be lost during patient transfer and resuscitation. Whenever possible, handwritten records should be scanned or photographed securely before turning the record and casualty over to the next level of care. Ongoing efforts to facilitate point of care documentation using handheld electronic devices are also under way and may be explored when available.

All team members should be educated on the use of the documentation flowsheet before deployment or training scenario. Once demonstrated and explained, both medical and nonmedical team members can improve their understanding of the patient’s condition, and even nonmedical personnel can become an asset in care as opposed to a hindrance or liability. Both Medics and those who are not Medics will be able to anticipate interventions required in the near future. This will enable a proactive approach to planning the procedures and care the patient receives as opposed to constantly reacting to patient crises, possibly when it is too late. We owe it to our patients to provide the best possible care despite unfavorable circumstances—proper documentation is a simple way to improve patient outcomes.
Documentation in Prolonged Field Care

Paul Loos, 18D1*; Erik Glassman, MS, NRP2; Dan Doerr, 18D (Ret)3; Roger Dail, 18D4; Jeremy Pamplin, MD5; Douglas Powell, MD6; Jamie Riesberg, MD; Sean Keenan, MD8; Stacy Shackelford, MD9

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 decomposition 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 flow-sheet that facilitates recognition of changes that could mark the early signs of decomposition.

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 flow sheet
- 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 pseudonyms assigned when a patient’s real name is unknown. In such cases, every effort should be made to continue the same pseudonym through transfers of care. Prehospital documentation submitted after patient transfer, to include AARs, should use the same name or pseudonym 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, and 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).

*Correspondence to paul.loos@socom.mil
1SFC Loos, 18D, USA, is noncommissioned officer in charge of Special Forces Medical Sergeant Surgery, Anesthesia, Records and Reports at the Joint Special Operations Medical Training Center, Special Warfare Medical Group at Fort Bragg, NC. 2Glassman, MS, NRP, is a Medic and instructor with the Diplomatic Security Service Training Directorate’s Operational Medicine Unit. 3SFC (Ret) Doerr is the medical instructor supervisor for the Special Operations Combat Medic Trauma III course, Fort Bragg, NC. 4SSG Dail, 18D, USA, is the senior 18D at 4th Battalion 3rd Special Forces Group (Airborne) and plans and implements numerous PFC training events. 5LTC Pamplin, MC, USA, is the director of virtual critical care and virtual health at Madigan Army Medical Center, Joint Base Lewis-McChord, WA. 6MAJ Powell, MC, USA, is an intensive care physician currently serving as the 4th Battalion 3rd Special Forces Group (Airborne) Surgeon and a staff intensivist at Womack Army Medical Center, Fort Bragg, NC. 7LTC Riesberg, MC, USA, is the 10th Special Forces Group (Airborne) Surgeon and is the coordinator for the Special Operations Medical Association Prolonged Field Care Working Group. 8COL Keenan, MC, USA, is command surgeon, Special Operations Command, Europe. He has previously served as battalion surgeon in both 1st and 3rd SFG (Airborne), and as group surgeon, 10th SFG (Airborne). He is a member of the Special Operations Medical Association Prolonged Field Care Working Group Steering Committee. 9Col Shackelford, MC, USAF, is chief of performance improvement, Joint Trauma System, San Antonio, TX.
• 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 decomposition, 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 online (Appendix D).
• 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: 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 transmitting 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 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 the 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 CareConsultation 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: 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:
– Overall condition of the patient: stable or unstable; better, same, or worse.
– Mechanism of injury or illness
– Injury(ies), current physical exam
– Vital signs to include trends and urine output
– 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 report,² 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.

Author Contributions
All authors approved the final version of the manuscript.

APPENDIX A  Tactical Combat Casualty Care Card, DD 1380

References

KEYWORDS: documentation; guidelines; prolonged field care
## APPENDIX B Prolonged Field Care Flowsheet

### Prolonged Field Care Card

<table>
<thead>
<tr>
<th>Day, Hour, Minute</th>
<th>D</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### BP
- Syntotic ▼
- Diastolic ▲

#### Temp X
- 95°

#### SPO2 O
- 90°

#### Pulse •
- 75°

#### MAP A
- 65°

#### ETCO2
- 45°

#### Respiration O
- 15°

#### Output
- No Read

#### Fluid Input
- PreOp Feed

#### Pain scale/PASS
- Debridement

#### AVPU/Neuro/MACE
- Nursing Care Reminders

#### Eye response
- 4

#### Oral response
- 3

#### Motor response
- 2

#### GCS Total
- 15

#### Drug/Intervention
- Dose:
  - Reposition q2hrs (BE Each side)
  - Change Blood Bag q2hrs
  - Oral Care / Hygiene q8hrs
  - Foley Care q8hrs
  - Sponge Bath q8hrs
  - Change IV Bag q24hrs
  - Change Foley Cath q72hrs
  - Change IV Lines q72hrs
  - Change HME q72hrs
## Prolonged Field Care Card

### Patient Information
- **Name:**
- **Date:**
- **Time:**
- **Weight:**
- **Blood type:**
- **EVAC Category:**

### MOI
- 1

### Injuries / Illness / Problems

<table>
<thead>
<tr>
<th>MOI</th>
<th>Treatment plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### Physical Examination

1. **Head:** 3
2. **Trunk:** 2
3. **Upper Limbs:** 13
4. **Lower Limbs:** 4

### Telemedicine Call Script
- **This is ___________ (Job Position) who I think has ___________ and I need Chief**
- **Complaint:** Brief History
- **Vitals:**
  - **HR:** ___________
  - **BP:** ___________
  - **Temp:** ___________
  - **Pulse:** ___________
- **On:** ___________
  - **AVPU:** ___________
  - **Exam:** ___________
- **Findings:**
- **Recommendations:**

### Notes
- **Fluids/Meds:**
- **Interventions:**
- **Flags:**

Newest version available at prolongedfieldcare.org
VIRTUAL CRITICAL CARE CONSULTATION (VC3) GUIDE – 2 2017 (v3.0)
To be used with Prolonged Field Care Card

1. Before calling, E-mail image of the casualty (wounds, environment, etc.), "capabilities" (back of page), & vital signs trends to dod.VC3@mail.mil
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: Commercial: +1 (210) 916 – VCCC (8222), DSN: (312) 429 – 8222
A: 253-968-1396
C: 
E: 

This is __________________________ I am a (job/ position) ______________________________

My best contact info is: ______________________________

YOUR best contact info is (Consultant’s number): ___________________ Alternate e-mail: ______________________________

*** PAUSE POINT to CONFIRM CONTACT INFO ***

I have a _______ year-old _______ (sex) _______ (active duty/foreign national/OGA, etc.), who has the following:

Mechanism of Injury or known diagnosis(es) __________________________ that occurred in (location) 

The injury/start of care occurred _______ hours ago. Anticipated evacuation time is (range) _______ 

Injuries/Problems/Symptoms:

Treatments:

He/she is currently (circle) stable/ unstable, getting better/ getting worse/ getting worse rapidly

Known Medication Allergies/Past medical/Surgical history is:

I need help with (be specific if possible, i.e. “I need help reading this ECG,” or “I need help stabilizing this patient,” etc.)

Other Consultants have recommended:

*** PAUSE POINT for Remote Consultant to ask clarification questions ***

<table>
<thead>
<tr>
<th>VITALS (current &amp; trend as of )</th>
<th>HR</th>
<th>BP</th>
<th>RR</th>
<th>SpO2</th>
<th>EtCO2</th>
<th>Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>UOP (ml/hr) over (# hours)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Status (GCS/ AVPU)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXAM: Neuro</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ext/ MSK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lungs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin/ Wounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LABS: ABG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lactate: Other:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** PAUSE POINT for Remote Consultant to ask clarification questions ***
### APPENDIX C  Continued

#### Plans/Recommendations

<table>
<thead>
<tr>
<th>PRIORITY</th>
<th>SYSTEM/PROBLEM</th>
<th>RECOMMENDATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neuro or problem #1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CV or problem #2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pulm or problem #3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GI or problem #4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Renal or problem #5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Endocrine or problem #6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MSK/ Wound or problem #7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tubes, lines, drains or problem #8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prophylaxis/prevention or prob#9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

#### TO-DO/ FOLLOW-UP/TO-STOP  NOTES

1. 
2. 
3. 
4. 
5. 
6. 

*** **PAUSE POINT, for Medic/Local Caregiver to ask clarification questions/READBACK***

Available “kit” (supplies, equipment, medications) !! IF POSSIBLE PHOTOGRAPH AND SEND VIA EMAIL BEFORE CALLING !!!!

<table>
<thead>
<tr>
<th>IV access:</th>
<th>IV</th>
<th>Central line</th>
<th>IO (location)</th>
<th>Other:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor:</td>
<td>Propaq</td>
<td>Tempus</td>
<td>Foley</td>
<td>Graduated urinal</td>
</tr>
<tr>
<td></td>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commo:</td>
<td>Tempus ii ID:</td>
<td>THIAB:</td>
<td>SAT#:</td>
<td>Local Cell#</td>
</tr>
<tr>
<td></td>
<td>Web VTC Address</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other (e.g. “FaceTime, VSee, Skype, etc.):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV Fluids:</td>
<td>Plasma-Lyte</td>
<td>LR</td>
<td>Normal Saline</td>
<td>3% saline</td>
</tr>
<tr>
<td>Colloids:</td>
<td>Hetastarch</td>
<td>Albumin</td>
<td>Other:</td>
<td></td>
</tr>
<tr>
<td>Blood products:</td>
<td>Whole blood</td>
<td>PRBC</td>
<td>Plasma</td>
<td>FDP</td>
</tr>
<tr>
<td>Medications:</td>
<td>Antibiotics: name/route/dose</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Morphine IV/ PO</td>
<td>Other opioid (name/ IV/ PO):</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fentanyl IV/ PO (pop)</td>
<td>Ketamine</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Midazolam</td>
<td>Diazepam (IV/ PO)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TXA</td>
<td>Other(s):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airway supplies:</td>
<td>ETT</td>
<td>Cric kit</td>
<td>LMA</td>
<td>Ventilator</td>
</tr>
<tr>
<td>Misc:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### APPENDIX D  Online resources

Joint Trauma System Forms
http://www.usair.amedd.army.mil/10_jts.html

Joint Trauma System Clinical Practice Guidelines

Prolonged Field Care https://prolongedfieldcare.org/