



Purpose

To provide guidance on the expected mission documentation for GSA-HEMS clinicians.

Procedure

Mission Documentation

For Review

Nov 2016

Introduction

Mission documentation is an essential component of patient care. The Mission Case-sheet provides a written handover for the receiving facility and forms the medico-legal record which may be relied upon many years later. The vast majority of missions involve care of a single patient and thus the expectation of excellent documentation is very high.

1. All missions (Pre-hospital and Inter-hospital)

1.1 Creation of a Mission Case-sheet

A unique Mission Case-Sheet and database entry should be created for every patient the service assesses or treats.

If the paramedic assesses the patient remote from the physician (such as a paramedic-only winch mission) they need to complete a Mission Case-Sheet and the physician can assist with completing the Clinical Database.

The only exception is a Major Incident /Mass Casualty Incident where multiple patients are assessed and/or triaged but not treated by our service.

Non-clinical missions (Call-off, Training, etc) also generate a Mission Case-Sheet but without clinical details. Non-clinical mission are captured by Air Maestro in the Non-clinical Mission tab.



1.2 Anatomy of the Mission Case-Sheet

Patient Details and Findings **PRE**-Retrieval Team Arrival

Details of Initial Assessment, Interventions and Clinical Course **POST** team arrival

Demographics such as patient name/s, DOB and address are very important for subsequent data matching and research

1.3 Accurate Timings

Studies have shown that EMS timings are often inaccurate. Clocks and timepieces are unsynchronised and timings may have to be calculated retrospectively. All timings for the mission case sheet and database should be taken from a smartphone (or watch which has been synchronised to a smartphone). All timings should be recorded prospectively. If there is doubt about a timing it can be often be verified by referring to aviation crew timings or Computer Aided Dispatch (CAD) System record.

1.4 Definitions

1.4.1 Time of First Notification: the first contact about the case – this may be the previous day in the case of booked backloads but will usually be the first call or batphone alarm time.

1.4.2 Dispatch: the time the team is tasked. This will usually be at the end of the phone call or bat phone alarm. In some cases it may be an agreed time for leaving base/home for a planned interhospital mission (eg. scheduled fixed wing departure)

1.4.3 Doors Closed: the time the clinical team is in the vehicle ready to leave.



1.4.4 Leave Base: the time the aircraft or road vehicle starts to move.

1.4.5 At Patient: the time the clinicians can physically touch the patient

1.4.6 Depart Scene/ Hospital: the time the team begin to move from scene/bedspace with the patient with the intention of travelling to the receiving hospital.

1.4.7 At Destination: time the team arrives in the receiving hospital destination bedspace

1.4.8 Return to Base: time the team arrive back at base.

1.5 Drugs/Fluids

All medications and fluids should be recorded. Both the incremental volume and concentration (or actual dose) must be accurately recorded. The time scale for TIME is usually 30min per large interval.

1.6 RSI

If an RSI is performed the following data points need to be recorded for the StateWide Retrieval Airway Registry:

- Pre-oxygenation strategy
- Time of induction
- Induction Doses
- Patient positioning
- Operator/s
- Number of Looks
- Grade of Airway
- Need for 30 sec drills
- Complications

1.7 Ventilation

All patients who are being mechanically ventilated need to have their ventilator settings documented. These include:

- Ventilator type
- Mode
- FiO₂
- Rate
- I:E ratio
- TV or PCV setting Preset tidal volume for volume controlled modes or preset inspiratory pressure for pressure controlled modes
- PEEP



- Peak or Plateau Pressure (In volume controlled modes at least one peak inspiratory pressure should be documented.) Where relevant (eg. ARDS) peak and plateau pressures should be recorded.

1.8 SD/S8s

Clearly document if any S4D/S8s are obtained from either the hospital (e.g. infusions already underway) or from an on-scene crew (drawn up but not yet administered by the crew). At the conclusion of the mission any quantities of unused S4D/S8's (including infusions connected to the patient) must be discarded and the discard signed for by both clinicians on the Mission Case-sheet.

1.9 Signing the Mission Case-Sheet

Every road and helicopter Mission Case-sheet should be double checked for completeness and signed by the Doctor and Paramedic to confirm the record is accurate and complete.

1.10 Amending Case Sheets

If a case sheet needs to be amended each new entry should be dated, signed and clearly labelled as "Addit:" to identify the timing of documentation.

2. Pre-hospital Missions

2.1 Summary /Assessment by Retrieval Team

The physician should record the initial assessment after arriving on scene and prior to any interventions – usually the primary and secondary survey in the form of ABCDE. A diagram of the patient can be useful to annotate multiple injuries.

A – Patency and Protection, indicators of difficult airway (e.g. cervical collar in-situ, bearded, limited mouth opening etc.)

B – RR, SaO₂, O₂ delivery or FiO₂, Chest palpation and auscultation findings

C – PR, BP, perfusion, Visible haemorrhage, Abdominal findings and visual assessment of pelvic integrity, long bone injuries

D – GCS and components, Pupillary size and response and Limb movements

E – Temperature, Facial or extremity injuries, bruising, burns etc

BSL if reduced GCS, Log roll findings if performed

2.2 Treatment By Retrieval Team

All physical interventions should be recorded: Splinting of pelvis or long bone, Cervical immobilisation, Dressings, surgical procedures, patient positioning



etc. If you thought about a specific intervention and decided *not* to do it, it is useful to also document this. If performed please remember to document your ultrasound findings.

2.3 Recording Vital Signs

For the majority of prehospital missions the LIFEPAK 15 is used to record patient vital signs. The LP15 record should have the Unique Identifier (R-number) added to allow subsequent data retrieval. At the conclusion of the mission the LP15 data should be printed out (Vital Signs/4 channel is the preferred format). The LP15 data printout should be annotated where necessary (spurious readings or displaced probes etc). One copy is given to the receiving hospital and the second returned to base with the Mission Case-sheet to be photocopied onto an A4 page for scanning into the Clinical Database.

In the rare event that the LP15 is not utilised (eg Winch access to a patient) the vital signs should be recorded as for an interhospital mission.

3.0 Interhospital Missions

3.1 Significant Investigations

Any important investigations should be documented. A blood gas should be taken and EtCO₂ correlated with PCO₂ for all intubated patients.

3.2 Summary/Assessment by Retrieval Team

For interhospital missions the Assessment will be depend on the specifics of the patient and their pathology.

3.3 For intubated patients:

- A- Tracheal tube size and cm at lips, Cuff pressure.
- B- SaO₂, EtCO₂, Chest Auscultation, Ventilator Settings
- C- PR, BP, heart sounds, Perfusion
- D- GCS and components, Pupil size and response to light, any focal neurological finding
- E- Temperature, BSL, existing tubes and lines. Further relevant examination

3.4 Treatment By Retrieval Team

All physical interventions should be recorded: Patient positioning, all lines, tubes and surgical procedures. If you thought about a specific intervention and decided *not* to do it, it is useful to also document this. If performed please remember to document your ultrasound findings.



All discussions with the SRC, MRU Consultant or Receiving Team should be documented.

3.5 Monitoring

Inter-hospital patients should have their vital signs recorded periodically. The frequency of documentation may vary according to team workload, mission duration, and acuity and stability of the patient. Relevant changes in physiology should be documented including responses to interventions. In stable patients 15 minutely observations should be considered a minimum standard for documentation. PR, BP (Systolic, Diastolic and MAP (where relevant)), SaO₂, FiO₂, EtCO₂

Where relevant the temperature and pupillary size and response should be documented en-route and on arrival at destination.

4. References

1. Ornato, J. et al Synchronization of Timepieces to the Atomic Clock in an Urban Emergency Medical Services System *Annals of Emergency Medicine* Volume 31, Issue 4, Pages 483–487, April 1998