

Communications & Documentation

Components of a communication system:

Base Station-radio hardware containing transmitter and receiver in a fixed location

Mobile Two Way radio- radio hardware containing transmitter and receiver installed in a vehicle VHF-100 watts, UHF 40 watts range 10-15 miles

Portable radio- radio hardware containing transmitter and receiver in a handheld unit 1-5 watts Less range, more limited than mobile radio.

Repeater- special base station radio receives on one frequency and retransmits on a second frequency with additional power and range.

Telemetry- signals converted to coded, audible signals transmitted to decoder, ex. Fax machine

Cell phones- portable radio connected through many cells (repeaters) linked by computer systems.

Simplex- push to talk, release to listen, one talks and one listens

Duplex-talk/listen simultaneously, transmits and received at the same time, usually contains double frequencies.

Digital radio equipment- uses encoder and decoder to allow different mobile and base station to operate on the same range of frequencies

Maintenance:

- Have backup system in case of equipment failure
- Daily checks
- Daily battery check/change
- Periodic maintenance by qualified, certified technicians



Federal Communication Commission (FCC)-

- Regulates radio operations
- Allocation of radio frequency
- Monitors all radio traffic
- 5 year license; call signs usually determined by longitude/latitude
- Heavy fines for violations

Medical Direction (control)

- Consolation
- Obtain orders for medication/interventions
- MD will determine need to medications/treatment based on your report
- Report must be concise, organized and pertinent
- Always repeat order back to MD/ED word-for -word for clarification
- Question any order that is unclear or appears to be inappropriate
- Always obtain name of physician giving the order.

HEAR Radio- Hospital Emergency Administrative Radio- used by EMS to contact ED

- Usually taped by hospital and or regional agencies
- Can be scanned by general public
- Provide the Following
 - Agency, unit and level of care
 - Pt. age, gender
 - Chief complaint

The 30 Second HEAR Report

- Age, gender
- Chief Complaint (brief)
- History of present illness/injury
- Pertinent past medical history
- Vital signs, LOC
- Pertinent physical findings, signs
- Treatment given (changes noted to treatment)
- ETA-estimated time of arrival

Dispatch

- Receives, screens assign priority to calls
- Alerts units
- Dispatch location
- Provided pre-arrival instructions until EMS units arrive
- Relays information to responding units
- Unusual situations
- Request assistance
- Records times for responding units
 - En Route to scene
 - Arrival at scene
 - Arrival at patient
 - En Route to ED
 - Arrival at ED
 - Clear from ED
 - In service
 - In Quarters

Principals of Radio Communications

- Listen before transmitting
- Clearly identify yourself/unit
- Push to talk button (PTT) - second to 1 minute
- Speak clearly and slowly
- Microphone 2-5 inches from mouth
- Do not use slang or profanity
- 10 codes vs. plain talk
- Do not give patient name or SSN over radio
- Provide non judgmental objective information

Verbal Communications at the Emergency Department (ED)

- Introduce patient by name ex, Mr. Kermit, Miss Piggy
- Summarize information given in HEAR report
- Provide additional information and changes since HEAR report

Interpersonal Communication

- Maintain eye contact
- Position yourself level with or lower than the patient
- Be honest
- Use language the patient can understand
- Address the patients by proper name (ex. Mr. Squirrel) unless directed other wise
- Do not use pet name (ex. Dear, Sweetie etc.) unless directed to
- Be aware of patients body language
- Speak slowly, clearly and distinctly
- Act and speak in a calm professional manner
- Allow the patient time to answer questions
- LISTEN to the patient
- Be aware of disabilities that may impair communications
- Consider need for interpreters
- Elderly patients may have visual and auditory deficits

Documentation

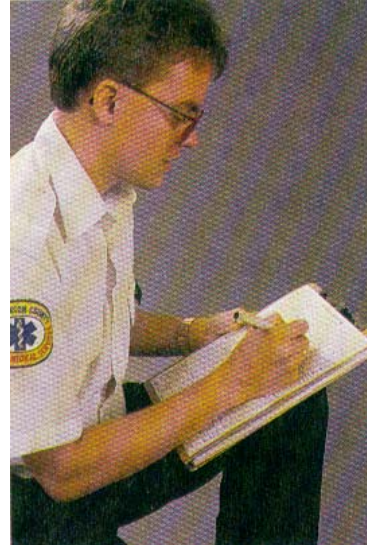
"If you did not write it down, you did not do it"

Function of Documentation- PreHospital Patient Care Report (PCR or PPCR)

- Continuity of care
- Legal documentation
- Education
- Administrative, billing information
- Research, statistics
- Evaluation and quality improvement

Minimum Data

- Each piece of information is an element
- All information needs to be collected
- Confidentiality
- Distribution of copies
- Use only standardized definitions (cc, HPI, PMH, etc)
- Narrative
 - Avoids conclusions
 - Pertinent findings, including pertinent negatives
 - Avoid using slang and codes
 - Correct spelling



Falsification of Information

- May lead to revocation of certification of license
- Poor patient care
- If an error in patient care occurs, document what did or not happen, note steps taken to correct problem

Correction of Written Errors

- Draw a single line through mistake, initial and date beside error (diaphoretic^{o2i22n02})
- Write correct information beside error
- So not obliterate the error
- Do not use correction fluid (white out)
- If error is discovered after form had been submitted
 - Use different color ink
 - Sign and date at time of correction
 - Submit a supplemental form

Patient Refusal - Competent adults may legally refuse treatment

- Must be informed of all possible consequences of refusal
- Document all steps taken to persuade patient to accept care
- Make sure patient can make a sound rational decision
- Document all assessment findings including a full set of vitals
- Contact medical control for assistance if needed
- Have a witness sign form, a family member or friend is preferred a crew member is the last resort

Special Documentation Issues

- Mass Causality Incidents (MCI) -insufficient time to fully complete PPCR, use triage tags,
- follow established local protocols
- Unusual events
- Injury or Exposure to EMS workers
- Supplemental Reports

EMS Report Writing

- Record of observations (scene and patient)
- Extension of the ED
- Documentation of patient contact
- Patient assessment information
- Record of treatment
- Record of patient's response to treatment

A generally accepted manner, in which a call sheet is written, follows the form:

Narrative Format

- Chief Complaint (CC)-summarizes in a word or two the patient' complaint
- History of present illness (HPI) sentence of two that describes the events directly related to the CC -
- Past Medical History (PMH or PMHx)- overall pertinent past medical history
- Physical exam (PE) -documentation of findings during patient assessment
- Treatment/transport (Tx)-describes treatment given and patient's response to treatment

A sample narrative for a patient who fell might look like this:

CC: contusion to Rt. Side of head

HPI: 61yoF, slipped on banana peel on floor and struck head on refrigerator

PMH: Osteoporosis, Lumpectomy, Lt. Breast '99, and Bronchitis

PE: Pt. found in kitchen sitting on floor A&O X 3. Small amount of blood noted on refrigerator door. Skin normal warm and dry and good strong pulses radially. Breath sounds clear bilaterally with normal respiratory effort. Contusion noted on Rt. Parietal region of head with small amount of dried blood around area. No deformity or depressions noted. PEARRL. Pt. denies LOC or syncope. Pt. c/o neck pain on palpation of cervical area. PMS good and equal bilaterally all extremities. Abd soft non-tender. Pt. last meal was 2 hrs. Prior to our arrival Secondary survey otherwise unremarkable.

Tx: Pt. fully immobilized and placed on backboard using full spinal precautions. Transported to Chippenham medical Center without incident turned over to ED staff with full report given.

SOAP Method

| | | |
|----------|------------|---|
| S | Subjective | The history of the patient: Both immediate history and precipitating events, medications, and reactions. Basically what the patient told you. |
| O | Objective | What the responder has found, initial assessment through on-going assessment |
| A | Assessment | Assessment of the incident as a whole. Not a diagnosis but rather general impression. |
| P | Plan | Plan of Action |

Advantages

- Fast and efficient
- Easy to use
- Received most approval from medical/legal professions

CHARTE Method

| | | |
|----------|-----------------|--|
| C | Chief Complaint | What the patient tells you. Their description of the incident or the Problem. |
| H | History | The patient's immediate history and any precipitating events. SAMPLE |
| A | Assessment | The full assessment of the patient |
| R | Treatment | The treatment that was given prior to the arrival of EMS, as well as, the on-scene treatment |
| T | Transport | Treatment given enroute and the mode of transportation |
| E | Exceptions | Problems encountered during the incident |

Advantages

- Breaks down incident into logical parts
- Divides the subjective and treatment into two parts
- Distinguishes between the assessments, What was found, and the treatment(s) given, both on scene -and enroute to hospital
- Presents a through analysis of all available facts

M.I.V Method

| | | |
|----------|---------------------|--|
| M | Mechanism of injury | The events that precipitated the incident to which you were called |
| I | Injury | The injury itself or the precipitating events or problem |
| V | Vitals | Current vital signs or a brief description of vital sign changes |

Advantages

- Presents the incident in a precise manner, one that can be adapted easily to radio communications.
- Works well in MCI to obtain orders for patient care and/or notify receiving hospital so that they can prepare for patient' arrival

Disadvantages

- The least informative and leaves out a lot of vital information
- Does not give the amount of information that the other formats do, nor does it organize the incident.

Common Abbreviations

| | |
|------|--|
| Abd | abdomen |
| ASA | acetylsalicylic acid, aspirin |
| CA | cancer |
| c/o | complaining of |
| CHF | congestive heart failure |
| COPD | chronic obstructive pulmonary disease |
| ex | chest |
| Dx | diagnosis |
| F | female |
| Fx | fracture |
| GI | gastrointestinal |
| Hx | history |
| IM | intramuscular |
| IO | intraosseous |
| IV | intravenous |
| Kg | kilogram (1000 grams, 2.2 pounds) |
| LOC | level of consciousness/loss of consciousness |
| M | male |
| NS | normal saline |
| NTG | nitroglycerin |
| PO | by mouth |
| prn | as needed |
| SL | sublingual |
| s/s | signs and symptoms |
| SQ | subcutaneous |
| Sz | seizure |
| = | equal |
| ↑ | increased, rise |
| ↓ | decreased, fall |