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UNIT TERMINAL OBJECTIVE

3-5 At the completion of this unit, the paramedic student will be able to follow an accepted format for dissemination of patient information in verbal form, either in person or over the radio.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

3-5.1 Identify the importance of communications when providing EMS. (C-1)
3-5.2 Identify the role of verbal, written, and electronic communications in the provision of EMS. (C-1)
3-5.3 Describe the phases of communications necessary to complete a typical EMS event. (C-1)
3-5.4 Identify the importance of proper terminology when communicating during an EMS event. (C-1)
3-5.5 Identify the importance of proper verbal communications during an EMS event. (C-1)
3-5.6 List factors that impede effective verbal communications. (C-1)
3-5.7 List factors which enhance verbal communications. (C-1)
3-5.8 Identify the importance of proper written communications during an EMS event. (C-1)
3-5.9 List factors which impede effective written communications. (C-1)
3-5.10 List factors which enhance written communications. (C-1)
3-5.11 Recognize the legal status of written communications related to an EMS event. (C-1)
3-5.12 State the importance of data collection during an EMS event. (C-1)
3-5.13 Identify technology used to collect and exchange patient and/ or scene information electronically. (C-1)
3-5.14 Recognize the legal status of patient medical information exchanged electronically. (C-1)
3-5.15 Identify the components of the local EMS communications system and describe their function and use. (C-1)
3-5.16 Identify and differentiate among the following communications systems: (C-3)
- a. Simplex
- b. Multiplex
- c. Duplex
- d. Trunked
- e. Digital communications
- f. Cellular telephone
- g. Facsimile
- h. Computer

3-5.17 Identify the components of the local dispatch communications system and describe their function and use. (C-1)
3-5.18 Describe the functions and responsibilities of the Federal Communications Commission. (C-1)
3-5.19 Describe how an EMS dispatcher functions as an integral part of the EMS team. (C-1)
3-5.20 List appropriate information to be gathered by the Emergency Medical Dispatcher. (C-1)
3-5.21 Identify the role of Emergency Medical Dispatch in a typical EMS event. (C-1)
3-5.22 Identify the importance of pre-arrival instructions in a typical EMS event. (C-1)
3-5.23 Describe the purpose of verbal communication of patient information to the hospital. (C-1)
3-5.24 Describe information that should be included in patient assessment information verbally reported to medical direction. (C-1)
3-5.25 Diagram a basic model of communications. (C-3)
3-5.26 Organize a list of patient assessment information in the correct order for electronic transmission to medical direction according to the format used locally. (C-3)

AFFECTIVE OBJECTIVES

At the end of this unit, the paramedic student will be able to:

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3-5.27 Show appreciation for proper terminology when describing a patient or patient condition. (A-2)

PSYCHOMOTOR OBJECTIVES

At the end of this unit, the paramedic student will be able to:

3-5.28 Demonstrate the ability to use the local dispatch communications system. (P-1)
3-5.29 Demonstrate the ability to use a radio. (P-1)
3-5.30 Demonstrate the ability to use the biotelemetry equipment used locally. (P-1)

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DECLARATIVE

I. General
- A. The importance of communications when providing EMS
  1. Paramedic functions as one part of a team
  2. Need to effectively communicate patient information and scene assessment
  3. Medical direction
  4. System control and administration
  5. Scene control
- B. The role of verbal, written, and electronic communications in the provision of EMS
  1. Communications between party requesting help and the dispatcher
  2. Communications between the dispatcher and the paramedic
  3. Communications between paramedic in the field and receiving hospital and/ or medical direction physician (on-line)
  4. Communication with receiving hospital personnel (on-arrival)
- C. The phases of communications necessary to complete a typical EMS event
  1. Occurrence
  2. Detection
  3. Notification and response
  4. Treatment and preparation for transport
  5. Preparation for next event
     - a. Pre-arrival instructions
     - b. Communication on-scene among other providers and with patient
- D. Diagram of a basic model of communications
  1. Idea
  2. Encoder
  3. Sender
  4. Media or channel
  5. Receiver
  6. Decoder
  7. Feedback
- E. The role of proper terminology when communicating during an EMS event
  1. Can shorten transmissions/ narratives
  2. Unambiguous
  3. Common means of communications with other medical professionals
- F. The role of proper verbal communications during an EMS event
  1. Exchange of system information
  2. Exchange of patient information
  3. Medical control
  4. Professionalism
- G. Factors that impede effective verbal communications
  1. Semantic
  2. Technical
- H. Factors which enhance verbal communications
  1. Semantic
  2. Technical
- I. The importance of proper written communications during an EMS event
  1. Written record of incident

2. Legal record of incident
3. Professionalism
4. Other
   a. Medical audit
   b. Quality improvement
   c. Billing
   d. Data collection

J. Factors which impede effective written communications
   1. Semantic
   2. Technical

K. Factors which enhance written communications
   1. Semantic
   2. Technical

L. Legal status of written communications related to an EMS event
   1. Record of incident
   2. Part of medical record
   3. Confidentiality/ disclosure

M. The importance of data collection during an EMS event
   1. System administration
   2. Research
   3. Quality management - often results in policy change

N. New technology used to collect and exchange patient and/ or scene information electronically
   1. Technology based
   2. Real-time capture of events/ information
   3. Integrated with diagnostic technology
   4. Reduces dependance on traditional means of documentation, i.e. written
   5. Influences role of medical direction
      a. Provides for advanced notification
      b. Potential for reduced time to in-hospital diagnosis and therapy

O. The legal status of patient medical information exchanged electronically
   1. Same status as traditional written documentation
   2. May not have a "paper record" of incident

II. Systems

A. Methodology used for EMS communication
   1. Simplex
      a. Advantages - allows speaker to get message out without interruption
      b. Disadvantages
         (1) Slows process
         (2) More formal
         (3) Takes away ability to discuss case
   2. Multiplex
      a. Advantages
         (1) Either party can interrupt as necessary
         (2) Facilitates discussion
      b. Disadvantages
         (1) Each end has tendency to interrupt the other
         (2) Voice interferes with data transmission

3. Duplex
   a. Advantages
      (1) Either party can interrupt as necessary
      (2) Facilitates discussion
   b. Disadvantages - each end has tendency to interrupt the other
4. Trunked
   a. Advantages
   b. Disadvantages
5. Digital
   a. Advantages
   b. Disadvantages
6. Cellular telephone
   a. Advantages
      (1) Less formal
      (2) Promotes discussion
      (3) Can reduce on-line times,
      (4) Physician can speak directly with patient
   b. Disadvantages
      (1) Geography can interfere with signal
      (2) Cell site may be unavailable
      (3) External antenna necessary
      (4) Problems with denied access to cell (PIN numbers unknown or forgotten)
7. Facsimile
   a. Advantages
      (1) Provides earlier notification
      (2) Produces another piece of medical documentation
   b. Disadvantages - must have access to a fax machine (at each end)
8. Computer
   a. Advantages
      (1) Potential to save retrospective data entry step
      (2) Can document in real time
      (3) Sort on many categories
      (4) Create multiple reporting formats
      (5) Provide system data quickly
   b. Disadvantages
      (1) Subject to limitation of machine and man
      (2) Lose flexibility

B. Components of the local dispatch communications system and function
1. Define 9-1-1 and E 9-1-1
2. Public safety access point
   a. Types
   b. Functions
3. Emergency medical dispatcher
   a. Functions
4. Pre-arrival instructions
   a. Purpose
   b. Types

5. System dispatcher
    a. Functions

III. Regulation
A. Functions and responsibilities of the Federal Communications Commission
1. Federal agency established to regulate telecommunications in the U.S.
2. Functions
    a. Licensing
    b. Frequency allocation
    c. Technical standards
    d. Rule making and enforcement

IV. Dispatch
A. The functions of an EMS dispatcher
1. Call taking
2. Alerting and directing response
3. Monitoring and coordinating communications
4. Pre-arrival instructions
5. Maintaining incident record
B. Appropriate information to be gathered by the emergency medical dispatcher
1. Caller's name and call-back number
    a. Enhanced 9-1-1 system
2. Address of event
3. Nature of event
4. Specific event information
    a. Call screening
    b. Pre-arrival instructions
C. The role of Emergency Medical Dispatch in a typical EMS event
1. Part of the EMS system team
2. First contact with the EMS system
3. Coordination of response
4. Coordination of communications
5. Provision of pre-arrival instructions to mitigate event prior to arrival of units
6. Incident data collection
D. The importance of pre-arrival Instructions in a typical EMS event
1. Provides immediate assistance
2. Complements call screening
3. Provides updated information to responding unit(s)
4. May be life sustaining in critical incidents
5. Emotional support for caller/ bystanders/ victim

V. Procedures
A. Information that should be verbally reported to medical direction
1. Depends of technology used for transmission
2. May vary with local protocol
3. Based on patient priority
4. Standard format
    a. Efficient use of communications system

b. Assists medical direction
c. Assures no significant information is omitted

5. Information
   a. Unit identification/ provider identification
   b. Description of scene
   c. Patient's age, sex, and approximate weight (for drug orders)
   d. Patient's chief complaint
   e. Associated symptoms
   f. Brief, pertinent history of the present illness/ injury
   g. Pertinent past medical history, medications and allergies
   h. Pertinent physical exam findings
   i. Treatment given so far
   j. Estimated time of arrival at hospital
   k. Other pertinent information

B. General procedures for exchange of information
   1. Protect privacy of the patient
   2. Use proper unit numbers, hospital numbers, proper names and titles
   3. Do not use slang or profanity
   4. Use standard formats for transmission
   5. Utilize the "echo" procedure when receiving directions from the dispatcher or physician orders
   6. Obtain confirmation that message was received