1. **Chapter 1, Part 2 EMS SYSTEMS**

2. **EMS System**
   - A comprehensive network of personnel, equipment, and services established to deliver aid and emergency medical care to the community.

3. **IN-HOSPITAL COMPONENTS OF AN EMS SYSTEM**
   - Emergency Services
   - Emergency and specialty Services

4. **OUT-OF-HOSPITAL COMPONENTS OF AN EMS SYSTEM**
   - Members of the Communication system
   - EMS Control Centers

5. **BLS**
   - ...refers to the basic life-saving procedures such as artificial respiration and cardiopulmonary resuscitation.

6. **ALS**
   - ...refers to advanced life-saving procedures such as positive pressure ventilation, drug therapy, and defibrillation.

7. **Some Systems Are Tiered in Which Arrives First and Then, If Required, Arrives Later.**

8. **History of EMS**
   - EMS systems have developed from the traditional and scientific beliefs of many cultures.

9. **Ancient Times**
   - First “...” established in Mesopotamia. Evidence of patient assessment techniques, and bandages.

10. **18th and 19th Centuries**
    - First efforts of field care developed by one of surgeons. Triage, a method of sorting patients by severity, developed.

11. **20th Century**
    - World Wars I and II and the and Korean conflicts resulted in great advances in patient care delivery systems including transportation and patient care procedures.

12. **1966**
    - The National Safety Act established the Department of which provided grants for EMS.
1969
The EMT- __________________________ program was made public. The first paramedic curriculum followed in 1977.

1971
White House issues $9 million in EMS __________________________

1972
The Department of __________________________ Education & Welfare funded initiatives to develop __________________________ systems.

What else happened in 1972 that had a huge impact on EMS?

EMS Systems Act of 1973
Provided funding for a series of __________________________ projects.
$300 million was allocated to study EMS planning, operations, expansion, and __________________________. Continued funding for regional systems until '81.

To be eligible for funding a system must address:
1. Manpower
2. Communications
3. Critical care units
4. Public Safety Agencies
5. __________________________ participation
6. Transportation
7. Access to Care
8. __________________________ Plans
9. Emergency Facilities
10. Pt Transfer
11. __________________________ Aid
12. Standardized __________________________ Keeping
13. Public Information and __________________________
14. System Review and Evaluation

Two Items the Legislation Omitted:
1. System __________________________ direction

1981
...the passage of the Consolidated Omnibus Budget Reconciliation Act (________________________) wiped out federal EMS funding.

1988 Statewide EMS Technical Assessment Program established these elements for EMS
1. __________________________
2. Resources
3. Management
4. Human Resources/Training
5. Transportation
6. __________________________
Every EMS system must develop an EMS system that best meets its needs. and regional-level EMS systems are often responsible for planning, developing protocols, and establishing standards.

The EMS Agenda for the Future (1 of 2)

Was published in
Was supported by the National Highway Traffic Safety Administration and the Health Resources and Services Administration
Forecast a “ ” for EMS in the future
Focuses on aspects of EMS related to emergency care of traditional health care facilities

The EMS Agenda for the Future (2 of 2)

Recognizes the in EMS
EMS of the future will be a community based health management system that is fully integrated with the overall system
Proposes continuing development of attributes including prevention, educations, and research

Medical Direction

A medical director is a physician who is responsible for all clinical aspects of the system.
Required for all services in above 1st responder

Medical Direction

The medical director’s role in a system is to:

• and train personnel
• participate in equipment and selection
• develop clinical
• participate in resolution and quality improvement
• provide direct input into patient care
• interface with the EMS system
• advocate within the medical community
• serve as the “medical conscience” of the EMS system

The Medical Director can provide on-line guidance to EMS personnel in the field. This is known as medical direction.

Medical direction refers to medical policies, procedures, and practices that medical direction has set up in advance of a call, such as standard protocols or standing orders.

are the policies and procedures for
all elements of an EMS system.

30 Protocols vs. Standing Orders
- ____________________________ provides uniform guidance for the management of patients
- Standing orders define the portions of the protocols which may be used directly for contact

31 Protocols are designed around the four “T’s” of emergency care.
- ____________________________
- Treatment
- ____________________________
- Transfer

32 Public Education
- An essential and often overlooked component of EMS is the ____________________________.
- EMS systems should develop plans to educate the public on recognizing an emergency.
  - ... accessing the ____________________________.
  - ... initiating _________ procedures.

33 Communications
A coordinated, flexible communications plan should include:
- ____________________________ Access
- ____________________________ Control Center
- Operation Communication Capabilities
- ____________________________ Communication Capabilities
- Communications Hardware
- Communications Software

34 Emergency Medical Dispatcher (EMD)
- The activities of an EMD are crucial to the efficient operation of EMS.
- EMDs not only send ambulances to scenes, they also make sure that system resources are in constant ____________________________.
- EMDs must be ____________________________ and technically trained.

35 Education and Certification
- Two kinds of EMS education are initial and continuing education.
  - ____________________________ education is the original training course for prehospital providers.
  - ____________________________ education programs include refresher courses for recertification and periodic in-service training sessions.

36 Initial Education
- Based on the EMT-Paramedic: National Standard Curriculum published by the U.S.
  - establishes the minimum content for the course
  - divided into 3 specific learning domains:
    - ____________________________ (facts or knowledge)
    - ____________________________ (assign emotions, values, and attitudes to information)
    - ____________________________ (skills)
Once the initial education is completed, the paramedic will become either
____________________________________ or
____________________________________.

Certification vs. Licensure
- Certification is the process by which an agency or association grants
  ______________________________________ to an individual who has met its qualifications.
- Licensure is the process by which a government agency grants
  ______________________________________ to engage in a given occupation to an
  applicant who has attained the degree of competency required to ensure the public's
  protection.

4 Certification Levels
- First ______________________________________ (ECA in Texas)
- Emergency Medical Technician- ______________________________________
- Emergency Medical Technician- ______________________________________        (Now AEMT
  at NR Level)
- Emergency Medical Technician- ______________________________________

The First Responder is usually the first EMS-trained provider to arrive on the
scene.

The EMT-Basic is trained to do all that a first responder can do, plus other complex
____________________________________.

The EMT-I Should Possess All the Skills of an EMT-B and Be Competent in
____________________________________ Airway, _________ Therapy, and
Other Skills.

The ______________________________________ is the most advanced EMS
provider.

National Registry of EMTs (NREMT)
- Prepares and administers standardized ______________________________________ for the
  First Responder, EMT-Basic, EMT-
  Intermediate, and EMT-Paramedic.
- Establishes the qualifications for registration and re-registration, and for establishing a
  minimal standard of ______________________________________.

Belonging to a Professional ______________________________________ is a
good way to keep informed about the latest technology.

Professional Organizations I Include:
- National Association of ______________________________________
- National Association of Search and Rescue
- National Association of State EMS Directors
- National Association of EMS Physicians
- National Flight Paramedics Association
- National Council of State EMS Training ______________________________________

A variety of ______________________________________ are available to keep
the paramedic aware of the latest changes in this ever-changing industry.

These Professional Journals Include:
- Annals of Emergency Medicine
Patient Transportation
- Patients should be taken to the nearest __________________________ facility whenever possible.
- Medical direction should designate the ____________________________ .
- Patients may be transported by ground or air.

The helicopter has become an integral part of prehospital care.

Military helicopters frequently assist civilian EMS systems.

A Type-I Ambulance

A Type II Ambulance

A Type III Ambulance

Not all receiving facilities are __________________________ in emergency and support service capabilities. Local systems and regions categorize hospitals based on capabilities.

Trauma Center Levels
- Level I - provides the highest level of trauma care with a __________________________ center
- Level II - may not have specialty pediatrics or a __________________________ on site
- Level III - generally does not have __________________________ surgical facilities available

Mutual Aid and Mass-Casualty Preparation
- A formalized mutual aid agreement ensures that __________________________ is available when needed.
- Agreements should be between neighboring __________________________ municipalities, systems, or states.
- Each system should also put a __________________________ plan in place for catastrophes that can overwhelm available resources.

KEY POINT
An EMS system should have a disaster plan in place that is __________________________ frequently.

Quality Assurance and Improvement
- Quality Assurance is designed to maintain continuous monitoring and measurement of the __________________________ of clinical care.
- Continuous Quality Improvement (CQI) is designed to refine and improve an EMS system, emphasizing __________________________ satisfaction.

An EMS system must be designed to meet the needs of the patient. Therefore, the only acceptable quality of an EMS system is __________________________ !

Service Quality
EMS quality can be divided into two categories:

- __________________________________________________________________________ Quality
- __________________________________________________________________________ Quality

62 Take-it-for Granted Quality

- People must be able to take EMS for granted
- Rules of evidence for new medication, process or procedure
  - There must be ________________________________ basis for change.
  - There must be ample ________________________________ .
  - It must be ________________________________ important.
  - It must be practical, affordable, and teachable.

63 Take-it-for Granted Quality

- ________________________________ review is the process of EMS personnel reviewing each other's actions and interactions with

64 Take-it-for Granted Quality

- ________________________________ are the standards that govern the conducts of a group or profession.

65 Service Quality

- Customer satisfaction can be created or destroyed with a simple ________________________________ or deed.

66 Research (1 of 2)

- Research programs are essential for moral, educational, medical, financial, and practical reasons.
- Future EMS research must address the following issues:
  - Which ________________________________ actually reduce morbidity and mortality?
  - Are the ________________________________ of a procedure worth the risk?
  - What is the cost-benefit ratio?

67 Research (2 of 2)

- Has your organization participated in research?

68 The Components of a Research Program: (1 of 2)

- Identify a ________________________________ .
- Identify the body of knowledge on the subject.
- Select the best ________________________________ for the study.
- Begin the study and collect raw data.

69 The Components of a Research Program: (2 of 2)

- ________________________________ the data.
- Assess and evaluate the results.
- Write a concise, comprehensive description of the study for publication in a medical journal.

70 System Financing

- EMS funding can come from a variety of sources.
- Fee-for-service from ________________________________, Medicaid, private insurance companies, or private paying patients is common.
- Public ________________________________ Models are becoming more popular.