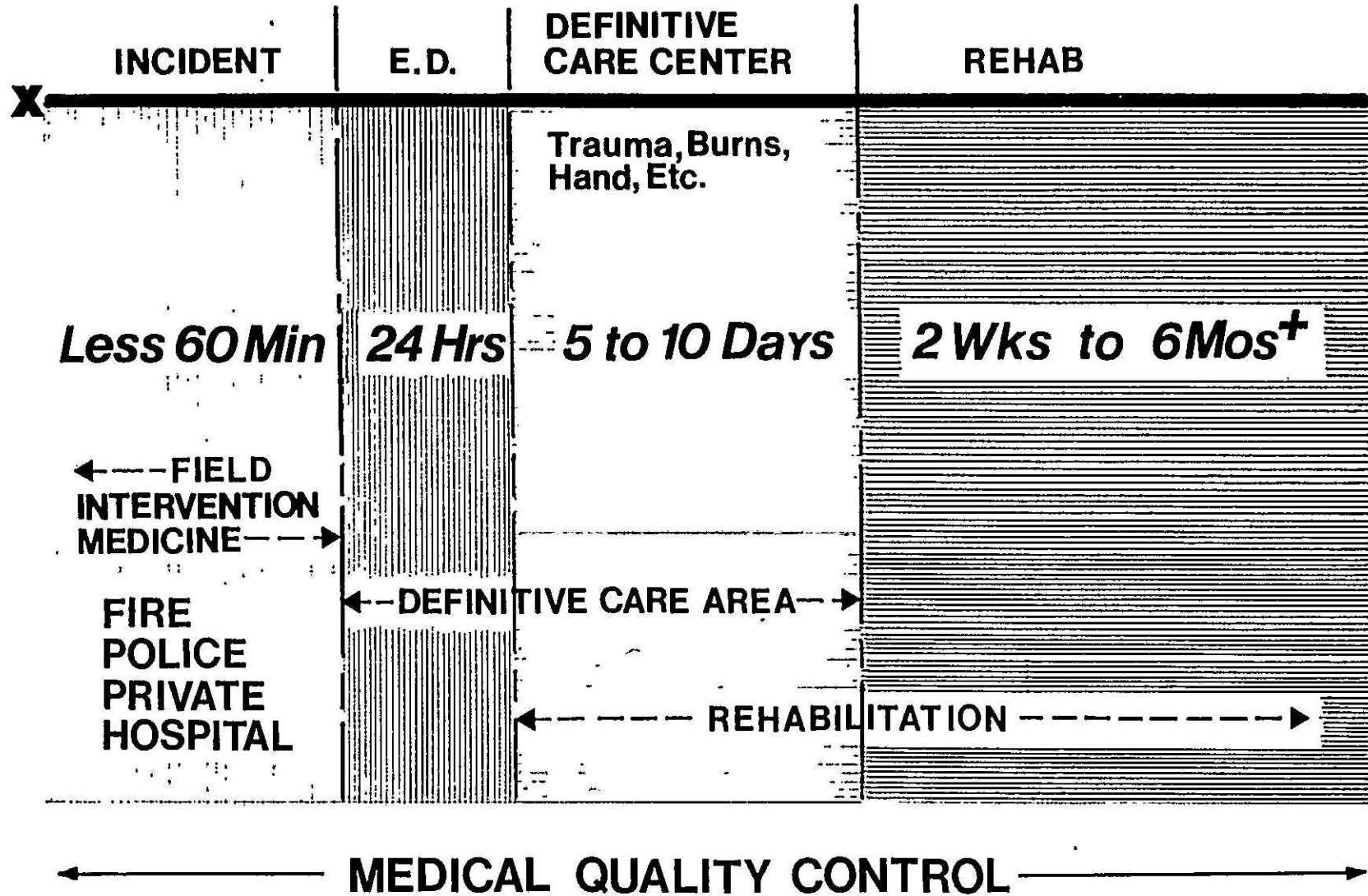


THE EMS CHAIN



1 Mr. Gretes?

2 MR. GRETES: Thank you very much, Dr. Mays.

3 (SLIDE.)

4 MR. GRETES: The concept of emergency medical
5 services and the idea of emergency medical services as
6 a third service means different things to different
7 people.

8 We want to present here an idea of what would
9 be a third service and the third service concept.

10 Within the State of Maryland, we have an EMS
11 system that is a third service. This particular system
12 consists of the following components; the first component
13 is access and communications. By "access" we mean methods
14 by which the traveler on the highway may be able to access
15 a system for response. "Communications" means the
16 ability to be able to consult with medical personnel.

17 As far as access is concerned, 911, the
18 universal access number, exists within Maryland, in
19 approximately nine of the counties. In other counties
20 they are dedicated emergency numbers. We have a
21 state-wide communications system which ties in throughout
22 the entire state.

23 As far as number two is concerned, resussitation
24 and stabilization, there is training of personnel within
25 the state, somewhere around 9,000 EMTAs are certified

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*do not
use idea
of third
services*

1 within the State of Maryland. They are responsible for
2 the resuscitation and stabilization at the scene.

3 Number three is transportation and is available
4 by land, surface ambulance; by sea, in coordination and
5 liaison with the United States Coast Guard and two of
6 the units within the state have their own emergency
7 craft that can work in areas of water.

8 Air transportation is available through the
9 Maryland State Police Medivac system which consists of
10 approximately twelve helicopters which are used and as a
11 back-up of that particular system, we have the 247th
12 medical detachment air ambulance at Fort George E. Meade,
13 Maryland, with six additional helicopters.

14 Care in route is afforded again by the EMTA
15 ambulance attendant or the CRT, depending on his level
16 of training and the condition of the patient. The
17 helicopter observer or the helicopter attendant is
18 trained to a level of what we call a trauma technician,
19 that is a new designation that is being promulgated at
20 the present time in other areas of the country.

21 Number five, we talk about definitive care.
22 "Definitive care" is available in the fact that area
23 wide trauma centers have been set up in various parts of
24 the state including Suburban Hospital in Bethesda;
25 Prince George's Hospital in Cheverly, Maryland;

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1 Peninsula General Hospital in Salisbury, Maryland and just
2 recently designated was the area wide trauma center in
3 Hagerstown, Maryland, which is the Washington County
4 Hospital.

5 Each of these definitive care centers have to
6 meet the criteria that is established by the State of
7 Maryland in a paper that is called "The Echelons of
8 Trauma Care."

9 Six, rehabilitation. Without rehabilitation
10 and proper rehabilitation, the victim that has become a
11 patient through the system is unable to return to his
12 community as a productive citizen.

13 One of the aims of EMS is to be able to take
14 a victim, convert him into a patient, rehabilitate him
15 and return him to his community as a productive citizen.

16 Number seven, coordination of EMS with the
17 first and second services. This coordination is done
18 in Maryland through the communications system, with the
19 police and fire departments. The Emergency Operations
20 Centers located in the different parts of Maryland that
21 are operated by the fire service are usually the ones
22 to receive the first call.

23 Number eight, as far as components are
24 concerned, is medical control. What is alluded to here
25 is physician supervision, physician guidance, triage

1 protocols and so on, in order to give medical guidance
2 to the physician extender that is acting in the field.

3 (SLIDE.)

4 MR. GRETES: In an emergency medical services
5 system, the pre-hospital phase that is the incident to
6 emergency department phase, is managed by EMTs and
7 paramedics or advanced EMTs, who convert the victims
8 into patients.

9 (SLIDE.)

10 MR. GRETES: We look at the EMS chain. This
11 particular slide is probably the most important as far
12 as the presentation is concerned because it gives the
13 total umbrella of EMS.

14 We start at point "X" which is the incident
15 that occurs on the highway or in the shopping center or
16 wherever it may be. This particular area is called
17 field intervention medicine. This lasts less than 60
18 minutes in most instances, as far as the total EMS
19 umbrella of patient care.

20 The next is the emergency department where
21 definitive care begins. This is approximately a 24
22 hour duration, if it is in a community hospital or a
23 hospital that does not have the facilities for definitive
24 care such as trauma, burns, et cetera.

25 The definitive care centers are specialty

1 referral centers are the centers at which the patient
2 is taken for the specialty care that is necessary,
3 whether it be burns or hands. For example, a hand center
4 has been established in Baltimore at Union Memorial
5 Hospital by Dr. Raymond Curtis. This particular center
6 handles all hand injuries that occur within the state
7 that are sent or referred to that particular center.

8 He has the facilities available and the
9 resources available with personnel to handle these
10 particular type of specialized injuries.

11 The adult trauma comes to the Maryland Institute
12 of Emergency Medical Services, our back up is Johns
13 Hopkins Hospital. Pediatric emergencies; patients under
14 age 14 go directly to the Pediatric Trauma Center at
15 Johns Hopkins.

16 Usually in these specialty referral centers,
17 the patient remains for five to ten days. During this
18 period, rehabilitation of that particular patient begins.

19 The patient is then moved onto other areas
20 as far as specialized rehabilitation, depending on the
21 type injury the patient has and in the rehabilitation
22 area, the patient is taught to again function in a
23 normal society and lead a productive quality life.

24 This rehabilitation phase lasts approximately
25 two weeks to six weeks in most instances.

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