If Your County Wants Better Emergency Medical Services

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If the people of your county or community want to improve emergency medical service, here are some guidelines that may help a planning group as it begins its work. They are things that have been found useful in Indiana situations and on which there is agreement from experience.

For instance, ten essentials for a good minimum service are:

1. Competent, trained teams of drivers and attendants who can give reasonable life support care to emergency cases on the scene. At least two people should be available for each ambulance.

2. Adequately equipped vehicles that meet standards as ambulances.

3. Twenty-four hour service with extra backup for peak demand periods and convalescent transportation.

4. Total coverage of a large geographic area by a coordinated system, that may make use of private and public suppliers of services.

5. Reasonable response time to all parts of the area served.

6. Two-way communication and dispatching system tying EMS system together by radio and telephone.

7. Adequate hospital emergency services available at all times in a minimum size local general hospital or special emergency medical center.

8. A method of financing that will support a high-quality operation over time (this may include a fee plus a subsidy).

9. A county or community based EMS council or committee that can set policy guidelines and help implement a system.

10. Local ordinances officially regulating the service, defining standards and describing responsibilities of local government units.

Who Can Get It Started?

An existing health planning group is in a key position to start the ball rolling. If it chooses to set up an EMS council, membership should come from at least four groups:

1. Providers of health services -- such as local medical societies, hospital administrators, nursing groups, ambulance services, and voluntary health organizations.

2. Public agencies -- such as fire, police and sheriff departments, civil defense units, health departments, official health planning agencies, and Red Cross.

*Robert K. Mills, Coordinator, Emergency Medical Services Division, Indiana State Board of Health, and Philip Martin, Executive Director, Indiana Emergency Medical Services Commission, have reviewed the publication from which this information was taken.
3. Local elected officials -- county commissioners, county council members, mayors, city councils, town boards, and township trustees.

4. Community leaders -- representatives of civic and service clubs, business groups, farm leadership, news media and other concerned citizens.

A council that is actually running an EMS system will need to incorporate as a non-profit organization in order to handle funds.

EMS Personnel Will Need Training

Standard recommendation for ambulance personnel is to complete the 81-hour basic level training that will certify them as emergency medical technicians. Such EMT courses are offered in several Indiana Vocational Technical schools around the state and at a number of large city hospitals.

Nurses working in hospital emergency departments can take advantage of a number of in-service courses taught at major medical centers.

Training for emergency physicians as well as for surgical and medical specialists is offered by the Indiana University Medical Center in cooperation with such professional groups as the American College of Emergency Physicians and the American Academy of Orthopedic Surgeons.

The EMS Division of the State Board of Health helps organize training opportunities of all kinds including special schools on handling highway accident victims, extraction of injured people from automobiles, and regular EMT training courses.

What Medical Treatment Facilities Will Be Needed?

EMS systems require a 24-hour emergency medical treatment facility either in a general hospital or more rarely at a special emergency treatment center. Most general hospitals have an "emergency room" or similar department staffed by doctors, nurses and specialists who are either on the premises or on immediate call. EMS facilities are rated by the State Board of Health and a committee on EMS facilities in terms of facilities, staffing and scope of care they are able to provide. The "best" facilities include a wide range of diagnostic and therapeutic equipment, blood and tissue banks and operating rooms; full time staffing of highly competent people, immediate access to all kinds of specialists, and capability to perform a range of medical treatment, surgery and therapy, for severe accidents and illnesses. Obviously, not all communities can afford or should try to have the most complete emergency medical treatment facilities, but should be part of a regional and state system.

Since response time out and back is so crucial, a treatment center needs to be located within a few minutes of all parts of a county. At present, most residents of the state are within 25 miles of an emergency treatment facility. The problem is one of upgrading the service at existing centers, more than creating new ones, with the exception of a few rural counties without general hospitals or clinics.

The State Board of Health, working with people from the medical-hospital profession, categorizes facilities according to their readiness and capability to treat emergency patients. EMS facilities are being rated in terms of categories suggested by the American Medical Association. Guidelines will be applied to the 111 hospitals in the state, based in large part on the following criteria:

Emergency Department

1. Essential staff -- availability, number, qualifications, experience, training of physicians, nurses and allied health personnel, either full time in department or "on call."

2. Essential capabilities and equipment -- ability to cope with a range of patient emergency problems. Kinds of equipment available needed for adequate care of all admissions.
Hospital

1. Essential staff -- availability of physicians and nurses in the range of specialties.
2. Essential capabilities and equipment -- blood bank, laboratory services, radiological services, operating rooms, post-operative recovery units, intensive care units, communications equipment, and transportation capability.

How Is Communication Handled?

A central dispatch facility is needed that can receive emergency calls from all points by phone and radio, then dispatch emergency ambulances to the scene. The dispatch center should be tied in with ambulances, hospitals, law enforcement and fire units, and other emergency treatment centers. Dispatchers need to be trained to screen out unnecessary calls, to judge what kind of emergency services should be dispatched, and to set priorities when the EMS system is overloaded. A single telephone number for all emergencies is desirable and should be toll free from all telephones in the area.

The central dispatching function may be handled for a number of different emergency services such as police, fire, sheriff, and civil defense from a common facility. Most communities and counties have the basis for such a facility already present in an existing municipal service. The nation-wide "911" telephone number can be set up by the telephone company with special exchanges, and is highly recommended. A single emergency telephone number decreases response time by eliminating the problem of looking up telephone numbers and determining where to call for help.

Ambulances should be equipped with two-way radios to the central dispatch and with hospitals operating on the Federal Communications Commission frequency of 155.340 MHz. Ambulance technicians need to communicate with the emergency department at all times, but particularly at the scene of the accident and enroute to the hospital.

What About Financing?

Ambulance services are usually dependent on user fees plus either direct government subsidies or private donations, on volunteer time of workers, or on the advertising value of the service to mortuary directors.

Maintaining a full-time EMS system is very expensive. In densely populated urban areas, private services can be supported on user fees, particularly if they supplement a hospital-based or government-based service. Often private providers have difficulty collecting fees and ask public agencies to underwrite the expense of uncollected bills. Most systems depend on a high proportion of income from user fees, whether public or private, but subsidies are common. Some users have insurance that will pay EMS fees.

Completely tax supported, free service is unusual, but is done in some communities. A free service may be over-used, and it is almost impossible to be selective on emergency calls.

Another problem that affects the economics of present-day ambulance services is the large number of small services operating in the same area. Too often several funeral home directors are offering marginal service and losing money because they lack the volume of business to spread high fixed costs over a large number of calls. Most counties could be well served by one central service with a high volume of business with some backup service perhaps in rural, outlying areas supplied by smaller operators. In some cases, the county or community can contract with a private provider to be the more or less exclusive operation, insist on high quality, guarantee a certain volume of business, and then extend a limited subsidy, if needed, to hold down user charges.

The opposite problem is the case where there are virtually no suppliers of ambulance service. Here the local government
may need to encourage private or public operations to come in and extend public funds to help start a central service.

Fortunately, we have both the necessary legislation and increased funding sources to help finance EMS systems. Local units of government can make virtually any arrangement they wish to create new and improved systems. General revenue sharing, special federal grant programs, foundation grants, and the local option tax have pumped new monies into local units.

Help for Your County

The 1974 General Assembly passed the Emergency Medical Service Act "to promote the establishment and maintenance of an effective system of emergency medical service." The legislation created a state EMS commission of eleven members to direct new programs and develop state standards for ambulances and personnel.

Some deadlines were set including a January 1, 1975 deadline on sending recommended rules and regulations to the Governor and implementation of rules no sooner than June 1, 1975. By January 1, 1976 the commission must establish standards for certifying ambulance service providers and by January 1, 1978 all ambulance operators must be "certified." Personnel will be required to meet education and training standards and ambulances will need to conform to certain requirements.

Previous state enabling legislation allowed counties, towns, and cities to make contractual arrangements with private providers or to go into ambulance business themselves. The 1974 EMS Act reiterated these provisions including the right to levy taxes for EMS purposes.

On the federal level, the 1966 National Highway Safety Act delegated responsibility to the state to develop plans for EMS, and provided funds for the planning process. This same act has provided grants to local units for the purchase of ambulances and equipment on a 70% federal and 30% local match through the Indiana Department of Traffic Safety and Vehicle Inspection. Training programs for Emergency Medical Technicians are also funded by this act and conducted by Ivy-Tech in a number of centers around the state. Local grants go only to governmental units and public institutions.

The Indiana State Board of Health has a division of "Emergency Medical Services" that assists communities in organization, training, and operation of ambulance services. A central office is maintained plus a number of regional EMS coordinators in out-state offices who are helping to upgrade service in their areas.

Regional comprehensive health planning organizations are also involved in the job of improving EMS, as part of their overall concern with a wide range of health delivery systems. These groups are particularly helpful in getting local leadership together to initiate action on new or improved systems.

Another significant piece of federal legislation was passed in 1973 called the "Emergency Medical Services Act." This act provides Federal support to assist and encourage the development of comprehensive EMS systems across the country, through grants to states, local government or other public and non-profit private entities. Various sections of the bill provide cost-share funds for (1) feasibility studies and planning; (2) establishment and initial operation of EMS services; (3) expansion and improvement of existing operations; and (4) EMS research. The Department of Health, Education, and Welfare (HEW) handles the program through their regional offices and it will run for three years.

The Farmers Home Administration can make loans for equipment and construction of facilities to public EMS providers. Local governmental units can issue general obligation bonds to secure these long term, 5% loans. Communities of 10,000 or less are eligible as well as counties where most of the communities served are 10,000 or less. Loans can be used for the 30% local funding requirement under the Department of Traf-
Historic Document

Your Choice of Ambulance Services

Typical choices here are to base the ambulance service in the local hospital, fire, police or sheriff's department, to contract with a private-commercial service, and to use volunteer groups. A combination of two or three suppliers of ambulance services may best serve a given area.

1. Hospital-Based Ambulance Service

Hospitals have been reluctant to go into this extension of hospital services because of financial problems and concern with upgrading more traditional services. From a professional medical care standpoint, the hospital-based ambulance service is the most desirable, and is recommended as the first choice by most state and federal authorities.

Emergency medical personnel can work in other areas of the hospital when not on active emergency duty and be more fully employed at all times. It is easier to keep staff trained and updated on medical techniques around a hospital. Long-term employment and continuity is encouraged in a large, diversified organization plus some advantages in recruitment of personnel. Collection of fees for the ambulance service is easier when the ambulance bill is simply added to hospital charges.

Possible disadvantages include the lack of interest on the part of some hospitals to get into the service, the absence of hospitals in some communities and counties, no existing communication system in some cases and lack of housing for vehicles and space for ambulance personnel.

2. Local Public Service Operations

Fire and Police Departments. Fire and police organizations have a long history of responding to emergencies and ambulance service is a logical extension of their proved capability. They have built-in communication systems, fast response time, good drivers, and are available around the clock in most communities. Personnel can be fully employed by combining ambulance duties with other jobs. Servicing and housing of vehicles is relatively easy.

The biggest weakness is probably the lack of training, competence, and dedication to providing expert medical care on the part of some firemen and policemen. Traditionally rescue operations are emphasized more than expert medical care at the scene of the emergency. Ambulance service duty is not viewed as being as important as other duties by many of the men. Often fire and police departments are not funded well enough to develop a quality ambulance service. Municipal services are ordinarily restricted to a particular city or town which is usually too small a geographical area to support a good ambulance service. Special arrangements can be made to extend service throughout a county, however. Finally, some communities have difficulty deciding on charges to be made for a service paid for largely by tax money and, at the same time, do not want to offer free service.

Sheriff's Department. Most of the advantages and disadvantages of the fire and police department-based services could also be cited for those based in the sheriff's department. The larger jurisdiction across an entire county is an additional advantage.

The continuity of an ambulance service in a county sheriff's department could be in jeopardy with the frequent changes in the office of the sheriff. Also, many sheriff's departments are already understaffed in terms of law enforcement and the department may have difficulty getting substantial budget increases.

Civil Defense Units. Advantages and disadvantages would be similar to those for other local public service operations. Not much increase is expected in these kinds of
organizations with civil defense activity at a minimum in most communities.

Health Departments and Special Districts. Starting a completely new and separate service entails considerable organizational work and some risk to local officials. The easier (but not necessarily better) route has been to add on the ambulance service operation to an existing public agency that has a nucleus of management skill and personnel.

3. Private-Commercial Ambulance Service

Funeral Homes. Factors responsible for the loss of funeral home ambulance services include higher operating costs, pressure to provide a higher quality service, reluctance or inability to charge enough to return a profit, and too many uncollected bills. The advertising value of providing ambulance service may also be less important today.

Despite these factors, a number of funeral directors are still providing excellent ambulance service where they can do a high volume of business and either charge enough for emergency calls or are subsidized by local government. Too often several funeral directors are attempting to provide marginal service in the same area, with not enough business for any one of them. Funeral directors can do as good a job as any other organization when integrated into a total EMS system and, in fact, have the longest history of service experience. Local government units can work out contracts with funeral directors to supply quality service, but a subsidy may be needed.

Special Ambulance Service Companies. With the decline in the number of funeral homes providing ambulance service, special ambulance service companies are growing in importance. There is a wide range in competence and training of the attendants and drivers in the geographical area served, and in financial arrangements with local government. These private companies often demand exclusive rights to all ambulance service in the rural areas they serve, in order to get a sufficient volume of business. The profit motive may also restrain the quality of service, but local contracts and ordinances can assure the community of adequate service from these companies.

4. Volunteer Groups

Volunteer ambulance services are usually tied to fire departments with some connected to police operations and a few as separate special services. The majority are in rural areas and small towns. Volunteers can create a high quality service but this requires unusual dedication on the part of a few leaders and strong community support.

Good volunteer EMS organizations seem to grow spontaneously out of community efforts, and are very difficult to create on demand where they don't exist. They can cover only relatively small areas, but do a good job in supplementing large, central operations. Rather slow response times are typical for volunteers. Savings to users and tax payers are substantial. Some volunteer groups are fearful of future state and federal regulations, but many of them meet or surpass recommended standards now.

Further Information

This brief report is taken from a more detailed publication -- Station Bulletin 54, Purdue University Agricultural Experiment Station. The longer publication is on file in your County Extension Office or in the office of the author.