



# trauma center

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## **A Preview:**

## A Total Emergency Medical Service System For Illinois

In the March, 1971 issue of the *Illinois Medical Journal*, a plan for the development of a state-wide system of trauma care was introduced.<sup>1</sup> Later, in the Special Health Message to the State, Gov. Richard B. Ogilvie pledged his support for this program,<sup>2</sup> and has subsequently assisted in its development by providing whatever state resources were necessary for the success of the program. A special Division of Emergency Medical Services and Highway Safety (EMS-HS) was developed within the Illinois Public Health Department and was charged with the responsibility of coordinating state and local resources in this effort. The staff of this division includes a new health professional for Illinois, the Trauma Coordinator.<sup>3</sup> The trauma program has evolved through local initiatives, including hospital and professional cooperation, to develop a much improved emergency medical care, communications, and transportation system for the critically injured accident victim.

Because of the success of the Illinois Trauma Program and the momentum that has been developed to totally upgrade the quality of Emergency Medical Services (EMS) across the state, a special demonstration contract has been awarded to the Division of EMS-HS. With the change in the Areawide EMS Planning Law (PA 76-1858), all hospitals must self-designate their emergency medical capability in an areawide cooperative plan. The first such comprehensive plan was outlined in the September, 1972 issue of this journal.<sup>4</sup> Monies and expertise are now available in Illinois to assist local health planning in order to develop the best emergency medical care in the nation. Outlined below is a condensation of the Total EMS contract which will assist communities in their areawide planning operation and in further upgrading emergency medical services across Illinois.

An environment now exists in the State of Illinois for the development of a Total State-wide Emergency Medical Service System. The

lack of provision for emergency illnesses, accidental death, and disability can no longer be classified as an insoluble health problem; medical expertise and technology are available in Illinois which can easily be applied to this previously neglected situation.

In Illinois, with the development of the State-wide Trauma Care Program, it has been shown that expert care, which was formerly available only at the university centers, can now be effectively and efficiently delivered throughout the state and especially in rural communities. The program goals of the Total EMS project and some of the new aspects to be developed are as stated below. Further details will be made available through the "Trauma Center" Section of *IMJ* and the Trauma Center Newsletter.

### **Program Goals:**

The following is a list of program goals which will be implemented in the State of Illinois' total emergency medical service system.

*Goal I.* To provide accessibility and emergency medical service to all citizens of Illinois in order that they receive benefits of emergency and critical care medicine.

*Goal II.* To develop a comprehensive emergency and critical care system which will fully utilize existing resources while stimulating the development of new care capabilities where these are insufficient or lacking.

*Goal III.* To develop practical solutions to the emergency medical service problem, using accepted forms of health care application.

*Goal IV.* To develop all phases of the program utilizing community and areawide planning.

*Goal V.* To continuously evaluate and monitor programs in order to determine all critical factors and to provide for ongoing modifications and analysis.

*Goal VI.* To develop a total system that will be financially and administratively self-supporting without continued subsidization from external forces or reliance on a state bureaucracy.

#### **Program Modeling:**

The effectiveness of a controlled systems approach to the problems of emergency medical services has been proven in the success of the Illinois Trauma Program. This program has not only established itself as a model that many other states are now following, but has also provided the necessary groundwork for Illinois to expand its trauma care system into a Total Emergency Medical Care System. The additional financial support of the recently awarded demonstration contract can now be used to complement present planning and implementation efforts.

#### **Communications:**

Consolidating all emergency communications capability for controlled dispatching and better utilization of communications and medical personnel, is the next phase of the Illinois EMS program. The demonstration contract has provided for the purchase of approximately 900 mobile ambulance radios. The Illinois Division of Telecommunications will assist in the purchase and engineering aspects of this component of the Illinois Emergency Medical Communications Network. This ambulance-radio capability will complement the basic hospital radio system being developed by the Division of EMS-HS and the Illinois Hospital Association.<sup>1</sup>

#### **Emergency Medical Transportation System:**

In the development of the Illinois Statewide Trauma Program, many of the critical problems of patient transportation have been evaluated and necessary experience gained. The Illinois Emergency Medical Service System plan will rely on ground ambulance transportation for the vast majority of emergency calls. Only on rare occasions in the foreseeable future will the helicopter be utilized for this purpose. Trauma Coordinators are presently working with local governments and other responsible agencies to upgrade and expand the present ambulance service capability.

In certain cases where definitive care is beyond the scope of a primary institution to which a critically ill or injured patient is delivered, secondary transfer must be arranged. Such a transfer is sometimes extremely difficult and its success is limited by the available transportation equipment and personnel. These transfers are many times further inhibited by local jurisdictional boundaries and weather conditions. For these and other reasons, an independent, regionally-based secondary ground ambulance system is being developed.

*Overland Critical Care Vans (OCCV).* Overland critical care vans will be based at the Regional and Areawide Centers and will provide the ultimate in specialized intensive (life-support) care for patients while they are being transported to advanced facilities where specialized definitive care is available. OCCV's will provide an extension of the Intensive Care Unit (ICU) critical area capability of Regional and Areawide hospitals to other institutions. In the OCCV, patients will receive continued and many times enhanced critical care during transfer. The threat of loss of continuity of patient care during necessary transfers will not occur. Uniform resuscitation equipment, fluids, drugs, ventilators, and critical laboratory aids will be installed in these vans.

*Outlying Critical Care Units (OCCU).* Outlying critical care units will extend the coronary and other critical care capability of major hospitals to remote rural community hospitals. Satellite coronary and critical care units (OCCU's) will be "on-line" to the advanced centers for consultation and support through dedicated telephone lines for patient monitoring and dataphone electrocardiographic (EKG) transmission.

*The Outreach Community Care Bus (OCCB).* The outreach community care bus will be a

multipurpose mobile teaching and disaster control unit which will be used to support emergency and non-emergency health problems in special areas of Illinois.

The OCCB will be equipped to function as a mobile disaster control center. It will have radios on the EMS-HS, fire, police, and Civil Defense frequencies. The OCCB will have the capability to react to a natural disaster by rapidly moving into the area within its region and immediately becoming the Radio Command Post and Triage Center.

#### **Training and Education:**

The continued quality of health care delivery of the Illinois EMS system will be dependent on the success of the training and educational programs. These programs are being aimed at training at all levels, including allied health personnel, emergency medical technicians (EMT-A), nurses, physicians, and the public.

*Emergency Room Physicians.* The American College of Emergency Physicians (ACEP) is now developing a curriculum for residency training programs for emergency room physicians. Two sites, Evanston Hospital and St. Francis Hospital (Peoria), are preparing to offer such residency programs.

*Trauma and Emergency Medical Services Fellows.* Surgical and Critical Care Fellows at the advanced centers will receive additional post-

doctoral training in trauma, burn, intensive care management, as well as bio-instrumentation, systems development, and program evaluation techniques. These Fellows will form the core of a sound, continuing community service and academic excellence for the statewide program.

#### **Conclusion:**

The Illinois Statewide Trauma Program has made great progress toward the solution of the problems of emergency medicine by bringing together many resources available within the state and tying them together into a functional regionalized network. The goal of the Total Emergency Medical Program is to capitalize on this developing system and to expand it into a full-blown system of emergency care for all citizens in Illinois. ◀

#### **References**

1. Flashner, B. A. and Boyd, D. R.: "The critically injured patient: a plan for the organization of a statewide system of trauma facilities," *IMJ*, 139:256-265, March, 1971.
2. Special Message on Health Care, Governor Richard B. Ogilvie, April 1, 1971. State of Illinois Printing Office, Springfield, IL.
3. Mains, K. D., Boyd, D. R., and Flashner, B. A.: "A new health professional: the trauma coordinator," *IMJ*, 142:158-160, August, 1972.
4. Forkosh, D. S.: "A plan for organization of emergency services on Chicago's north side," *IMJ*, 142, September, 1972.

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## **A.M.A. Sends American Doctors to Treat Vietnamese Civilians**

Another party of American physicians departed from San Francisco for Viet Nam in June for tours of duty treating patients in provincial hospitals in South Viet Nam under the American Medical Association's Volunteer Physicians for Viet Nam program.

During the seven years of its operation, the program, carried out by the AMA under contract with the Agency for International Development, has provided more than 70 U.S. civilian physicians to serve more than 900 tours in provincial hospitals in the Asian country. One-fifth of the volunteers have returned for two or more of the two-month tours.

The AMA volunteers receive only a round-trip plane ticket and \$10 per day toward living expenses in Viet Nam.

The volunteers will be assigned on arrival in Saigon to provincial or prefectural hospitals, the medical school in Saigon or other medical care facilities. They will provide service in surgical and medical care of Vietnamese civilian casualties as well as other patients; assist in upgrading the national health services; teach and advise their Vietnamese counterparts, and teach Vietnamese medical students.

AID recently asked the AMA to extend the program through June 30, 1973. Some 100 additional volunteers will be needed. Further information is available through the Office of the Program Director, Volunteer Physicians for Viet Nam, American Medical Association, 535 N. Dearborn St., Chicago, Ill. 60610.