

EMS/Trauma System Development in Texas

A Brief History

FY2000

Approximately 30 Texans die every day from injuries; almost 10,000 each year. Since trauma is the leading cause of death in persons aged 1 - 44 years, the years of potential life lost are staggering: ~290,000 in 1993. Using a per-capita income of \$19,189, this represents a phenomenal \$5.6 billion in lifetime income lost and a loss to the state in lifetime tax revenues of \$518 million for that one year of trauma mortality alone.

Mortality is not the only side of this issue; for every trauma victim who dies, at least six are seriously injured. Total years of productive life lost to disability are not currently known, but would add greatly to the figures above. In addition, many persons with severe disabilities resulting from injuries may be dependent to some degree on federal, state and local assistance.

Trauma can occur anywhere at any time. Critical trauma victims must reach definitive care within a short period of time, often called the "golden hour," to help prevent death or disability. To insure this occurs, a set of resources must be in place and immediately accessible at all times. These resources include informed citizens, communications systems, prehospital care providers, and multidisciplinary trauma teams in emergency departments. With the inclusion of public information, prevention activities, and rehabilitation, this coordination of resources is called a trauma system. Studies have shown that coordination of the emergency medical resources available in an area can result in a major decrease in preventable trauma deaths.

Rural areas may not have the means to provide this full continuum of resources; therefore, preventable death rates due to trauma in these areas may be considerably higher than urban areas. It has been estimated that such rates could be as high as 85%. The problem is further compounded because the large urban centers, which usually have the appropriate resources available, are overloaded with patients and may not be able to take rural trauma transfers.

The Texas legislature wanted trauma care resources to be available to every citizen. The Omnibus Rural Health Care Rescue Act, passed in 1989, directed the Bureau of Emergency Management of the Texas Department of Health to develop and implement a statewide emergency medical services (EMS) and trauma care system, designate trauma facilities, and develop a trauma registry to monitor the system and provide statewide cost and epidemiological statistics. No funding was provided for this endeavor at that time.

Rules for implementation of the trauma system were adopted by the Texas Board of Health in January 1992. These rules divided the state into twenty-two regions called trauma service areas (TSAs), provided for the formation of a regional advisory council (RAC) in each region to develop and implement a regional trauma system plan, delineated the trauma facility designation process, and provided for the development of a state trauma registry.

The Department has shown ongoing commitment to establishment of the system statewide. A task force, appointed by the Commissioner, produced a strategic plan for trauma system development to insure its success. The Bureau was reorganized to emphasize the importance of the Trauma Program. Bureau staff provide information and technical assistance to all requesting entities.

System development activities around the state have clearly demonstrated on-going positive support for this project. A RAC has been established in all of the TSAs and all RACs have had their regional system plans approved. Additionally, over 175 hospitals have been designated as trauma facilities. Much of this activity occurred despite the fact that there was no state funding available for either system development or uncompensated trauma care until fiscal year 1998.

During the 1997 state legislative session, four million dollars was appropriated to a newly established EMS/Trauma System fund. Rules, which were adopted in April 1998, include requirements for EMS and hospital participation in regional trauma system development, development of regional system plans, and submission of data to the state registry. These funds are being disbursed to EMS providers and RACs to promote system development, with a small percentage earmarked for uncompensated hospital trauma care.

The recently ended 1999 legislative session increased state funding for EMS/trauma system development by \$6 million per year. Plans for disbursement of these funds are currently being developed. Additionally, \$1 million per year was appropriated for uncompensated tertiary care provided to out-of-county or out-of-service-area patients provided by designated trauma facilities. It should be noted, however, that this funding only begins to address the problem of uncompensated trauma care, which is estimated at \$300 million a year.

A fully implemented statewide trauma system will have many positive outcomes, including decreases in the number of trauma incidents, injury severity, the number of preventable deaths, severity of trauma-related disability, and the number of persons dependent on state assistance programs. The Texas Department of Health will continue its work toward that goal.