**Position Statement** 



## The Importance of Trauma Systems and the Vital Role of Nursing in Trauma Systems

Traumatic injury is the leading cause of death and hospitalization in the United States. It is the leading cause of death for people aged 1 to 44 years, including the leading cause of death for children. Each year nearly 25% of Americans sustain an injury requiring medical attention. In 1999, there were 97,860 deaths from traumatic injury. In 2000 there were 2,466,000 hospital discharges and over 40 million Emergency Department visits related to injury. 1.

Trauma Systems provide an inclusive, integrated structure designed to provide optimal care to injured patients. This organized effort provides care from the time of injury through rehabilitation and reentry to society. Trauma Systems include access to appropriate care and the provision of clinical excellence throughout the continuum encompassing research and prevention components.

Trauma Systems have been proven to be effective. After review of 11 Trauma Registry database studies Jurkovich and Mock concluded that these studies consistently demonstrated a 15-20% decrease in the risk of death comparing trauma systems outcomes to the Major Trauma Outcome Study (MTOS) norms 2. Review of multiple expert panel studies by MacKenzie led to the conclusion that care delivered at trauma versus non-trauma center hospitals may be associated with less inappropriate care. A significant decrease in preventable deaths among the very seriously injured was also identified. 3. Mullins and Mann examined 9 population based research studies of Trauma Systems and found a 15-20 % improved survival rate among seriously injured patients with Trauma system implementation 4. Based on this evidence the conclusion can be made that the development of Trauma Systems is important and must be supported.

Trauma Nurses possess a specialized body of knowledge for caring for the injured patient, and dedicate themselves to ongoing specialized education unique to trauma care. They are a fundamental component of direct trauma care and the operation of Trauma Centers and Trauma Systems. Since nurses are at the bedside 24 hours a day, 7 days a week, they are responsible for monitoring the trauma patient, assessing the patient for evolving injuries, actively performing procedures, assessing and relieving pain, teaching and comforting patients and their families. Aikens et al, found that increasing the number of patients each nurse is assigned to care for increases mortality rates within 30 days of admission and the rates of deaths after complication in surgical patients. This illustrates the importance of nursing to the care of patients *s*. Optimal patient outcomes are dependent on the availability of qualified nurses that are committed to the specialized needs of the injured patient and the availability of resources dedicated to trauma care.

In addition to direct patient care, nurses have been integral to the development, maintenance and leadership of Trauma Centers and systems across the country. The Trauma Program Manager has a pivotal role in reviewing and administering hospital trauma centers and regional systems to improve patient outcomes, decrease costs, improve processes, and enhance education. Trauma Standards written by State organizations and the American College of Surgeons 6 include this important role as a requirement of Trauma Centers. Clinical Nurse Specialists, Nurse Practioners, nurse educators; prevention coordinators and many other nursing roles are also integral to the successful functioning of Trauma Centers.

Development of state trauma systems is frequently led and facilitated by a nurse as well as various national leadership roles. Many states involve multidisciplinary teams, which include nurses to help develop/maintain their trauma systems and to write trauma standards.

The Society of Trauma Nurses believes:

- Trauma is a major national and international public health problem.
- Trauma System development is vital to decreasing death and morbidity of injury.
- Federal funding of Trauma Systems is essential to the continued development of Trauma Systems.
- Nurses are a fundamental component of trauma care and trauma system development.
- Adequate staffing of qualified, trauma educated nurses is essential for quality care of the injured patient and must be maintained.
- Nurses must continue to be involved in the development of hospital trauma programs and Trauma systems.
- Nurses must be involved in multidisciplinary teams that develop/maintain their trauma systems and write trauma standards.

## References

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