

The Trauma Managers Association of California (TMAC) is a non-profit association whose aim is to advocate for optimal trauma patient care through networking with colleagues both at the hospital level and Emergency Medical Services level, with a quest for statewide improvement of trauma care delivery.

It is the position of TMAC that as the role of the Trauma Registrar has evolved and expanded to meet the complex demands of trauma data management and performance improvement, so must the essential knowledge, skills, and areas of competency evolve to support the role. Minimum staffing requirements for the Trauma Registrar should not exceed 500–750 cases per 1.0 full time equivalent (FTE). Entry-level role preparation, at a minimum, should include advanced medical terminology, knowledge of human anatomy, medical record coding, and working knowledge of computer databases. The Registrar must attend or have previously attended two courses with 12 months of being hired: (1) the American Trauma Society's Trauma Registrar Course of equivalent provided by a state trauma program; and (2) the Association of the Advancement of Automotive Medicine's Injury Scaling Course. In addition, the registrar should get 8 hours of registry specific continuing education per year.

Background

A thorough review of current trauma related organizations was conducted in developing this position paper related to the Trauma Registrar staffing, role, and preparation.

The American College of Surgeons Committee on Trauma (ACS COT) requires that verified trauma centers have an effective performance improvement program to evaluate the care of the injured patient. The trauma registry is *the* essential information resource for evaluating the quality of trauma care. With the transition from paper-based to electronic information systems, it is essential that all data-related processes are optimized to assure that data is accurate, validated, and concurrent. It is the Trauma Registrar, who through data abstraction, analysis, and data entry, influences the perception of the injuries sustained and the care rendered to injured patients.

A primary purpose of aggregating trauma related data is two-fold: research and improvement of patient care which can improve outcomes for the trauma patient. Accurate and timely data provides evidence for benchmarking and process improvement activities. In addition, data serves as a base from which to develop standards of care. In order to preserve data integrity, each data element must be collected, as closely as possible, by the same definition and according to the same guidelines by each facility that contributes to a state or national database.

Position Paper: Trauma Registrar: Staffing, Role, and Preparation Trauma Managers Association of California Date: March 2016



As healthcare has evolved, the importance of data has taken on a greater role. The Joint Commission utilizes data in performance improvement activities directed at improving the outcomes of patients. The Institute for Healthcare Improvement incorporates data in their efforts to optimize patient safety. The California Hospital Association depends on data to provide effective representation and advocacy for hospitals across the state. Accurate and timely data is essential to benchmarking care delivered to our patients, reimbursement for services provided, and research activities designed to reduce the number and severity of trauma-related injuries.

The National Trauma Data Standard® (NTDS) is the largest aggregation of trauma data assembled. The goal of the NTDS is to inform the medical community, the public, and decision makers about the wide variety of issues that characterize the state of care for injured persons. All ACS verified trauma centers are required to submit data to the NTDS.

Position Paper: Trauma Registrar: Staffing, Role, and Preparation Trauma Managers Association of California Date: March 2016



The Trauma Registrar is responsible for the daily management of the registry, including all aspects of data collection and validation, and for generating reports needed to describe and evaluate all aspects of trauma care. The significance of the trauma registry to trauma performance improvement requires that some minimum standards for the education and qualification for Trauma Registrars be identified; however, the complexity of the trauma registry and trauma data management require that the role and current standards evolve.

Registrars may come from a variety of backgrounds, such as nursing, health information, medical billing, and information technology. The entry-level registrar should possess basic knowledge of medical terminology and human anatomy, as well as, basic computer hardware and software skills, such as word processing and spreadsheets. With additional training and experience, the registrar must demonstrate and maintain competency in data collection methods; changes and updates in specific aspects of health information, such as the electronic health record; advanced report writing; strategies for communicating data to a variety of audiences; trauma scoring; and hardware, software, and database management. To support the ongoing development of the registrar from entry level to experienced/advanced level, there are essential areas of knowledge, skill, and competency that should be mastered. The integrity and value of data entered into a trauma registry database will be directly affected by the training and expertise of the Trauma Registrar who abstracts, enters, and manages the data.

<u>Health Information</u>: Knowledge of advanced medical terminology and human anatomy enables the registrar to accurately identify, interpret, abstract, code, and score essential data elements. Expertise with both coding and scoring is essential.

<u>Computer Technology</u>: Experience with computer hardware and proficiency with a variety of software products, such spreadsheets, presentation, and word processing is essential. The registrar must possess accomplished typing and data entry skill and possess knowledge of complex database systems and data management principles. The registrar must maintain data security in compliance with the current Health Information Portability and Accountability Act requirements.

<u>Trauma Specific Software</u>: A trauma registry is complex and requires oversight management skills. The registrar must have mastery of the registry software and be able to facilitate interfaces between multiple databases requiring trauma data, e.g., local, regional, state, or national registries or national trauma quality improvement programs, within specified timelines. The registrar must maintain competency with the facility trauma registry software through vendor or facility-based training. In addition, the registrar must comply with Position Paper: **Trauma Registrar: Staffing, Role, and Preparation** Trauma Managers Association of California Date: March 2016



the trauma data dictionary to assure data quality.

Role Training Requirements: The registrar should complete local registry training as appropriate. Additional training should include the American Trauma Society Trauma Register Course, the American Association for the Advancement of Automotive Medicine Abbreviated Injury Scale Scoring Course, and the Society of Trauma Nurses Trauma Outcomes and Performance Improvement Course within 12 months of being hired. The registrar should strive to begin the certification process within 2 years of hire and attend annual continuing education on registry-related topics.



<u>Staffing</u>: There is no independent professional organization for Trauma Registrars. The American Trauma Society (ATS) provides education and national certification resources for Trauma Registrars. The ACS COT is the only trauma-based organization to stipulate staffing patterns for Trauma Registrars. The ACS COT requirement is 1.0 FTE for every 500-750 admitted trauma patients annually. This requirement is supported by similar staffing requirements in registries such as National Cancer Registry Association.

Position of the Trauma Managers Association of California:

Based on a thorough review of national organizations involved with trauma patient care, expertise consultation with trauma professionals from nursing and registrars, it is the position of TMAC that the role of the Trauma Registrar requires a minimum staffing ratio of 1.0 FTE for every 500–750 trauma registry patients. In addition, the minimum preparation for the Trauma Registrar should include advanced medical terminology, knowledge of human anatomy, medical record coding, and a working knowledge of computer databases.

<u>References:</u> Committee on Trauma American College of Surgeons (2014). *Resources for the Optimal Care of the Injured Patient 2014.*

National Cancer Registrar Association (2011). NCRA workload and staffing study. University of California, San Francisco.

National Trauma Data Standard (2016). Retrieved from https://www.ntdbdatacenter.com/

Position Paper: Trauma Registrar: Staffing, Role, and Preparation Trauma Managers Association of California Date: March 2016



Position Paper

Trauma Registrar: Staffing, Role, and Preparation

Trauma Managers Association of California Date: March 2016