**Statement on Trauma Registry Recommendations and Best Practices:**

The Society of Trauma Nurses (STN), through a specialized and collaborative workgroup of nationally recognized trauma registry/program leadership, developed the following statement on Trauma Registry Best Practices to enhance future iterations of national trauma registry standards and continuing education.

The key to the success of a trauma center is excellent clinical care and a strong infrastructure. The trauma registry is recognized as the foundation of an excellent trauma center. Resources dedicated to concurrent accurate data abstraction, validation and utilization are essential for driving enhancements and advancements in clinical care delivery, research and injury prevention. Trauma registry data is vital for performance improvement efforts to effect change and improve patient outcomes.

The American College of Surgeons (ACS) has guided trauma care setting national standards measured by a verification process. The most recent standards, "Resources for Optimal Care of the Injured Patient", was released in March and revised December of 2022. In response, the Society of Trauma Nurses, American Trauma Society, Trauma Center Association of America, and Abbreviated Injury Scaling-Certification Board, have prepared the following response and supports the following recommendations for consideration:

1. **Staffing:**

    - All trauma centers (Levels 1,2,3) should have a trauma registrar dedicated to the trauma program for the program's individual requirements. In advocating for resources, trauma program leadership often finds it challenging to obtain staffing needed to be operationally successful with less restrictive language. Therefore, we recommend that the supportive documentation for the range of record abstraction per FTE be less broad and take into consideration, the number of data elements in conjunction with hospital, regional, state or national data bases (i.e. National Trauma Data Bank and/or Trauma Quality Improvement Project), along with the % effort required for additional job responsibilities to support data analytics, performance improvement and research efforts. A staffing algorithm that provides a standard baseline should be considered when advocating for basic and incremental staffing needs.
    - Additional registrars may be needed to support trauma center research through report generation and abstraction of additional customized elements. One consideration would be to determine a percentage of registry effort per faculty/fellow, especially for centers' faculty whose academic appointments require a certain volume of publications for advancement.
    - Trauma centers with multiple registry FTEs should have a structure that includes a trauma registry lead with a portion (% of effort) of their FTE dedicated for administrative duties to oversee registry operations, quality (data validation), data analytics, and education. This structure supports the function of the Trauma Center.

**2. Embracing Artificial Intelligence in trauma registries:**

- Traditionally, registrars abstracted all data elements through a manual process of medical record review and data entry. As technology advances, we recommend the trauma centers develop electronic data transfer process to reduce key stroke entry and promote a focus on injury coding, event capture and data validation. The focus of the registrar should shift to one of data validation where reasonable. Although critical thinking is essential to ensure data is captured based on definition, the subset of patient demographics may not.

**3. Continuing Education and Certification(s):**

- A clear orientation program to cover the basics of anatomy and medical terminology prior to attending an AIS class to ensure success.
- All clinical staff should be oriented to the value of quality data abstraction and how their commitment to ensure high quality documentation within the EMR can impact its success.
- Trauma systems have always focused on fostering a culture of continual learning. In keeping with that focus, we recommend a defined and consistent educational program for initial and continued education for key stakeholder roles within the trauma program. This additionally supports a culture of career longevity and advancement.
    - Trauma registry data should be collected and maintained by trauma registry professionals with appropriate education and training to ensure high quality data abstraction and coding. Individuals often come into the role with a variety of educational backgrounds and work experiences. We recognize that there are registry educational programs available and support the background and standardization they bring to this key role.
    - Registry work requires a unique skill set that includes: the ability to read and interpret complex medical records to assign injuries, hospital events and injury severity scores that affect the risk adjusted outcomes of the trauma center.
    - We recommend that the standard accommodate and consider the need for growth and experience prior to requiring advanced certifications.
- Advanced certifications should be tailored towards the specific duties of the registrar and aligned with the nationally recognized agencies' recommendations for eligibility requirements.
    - Example:
        - Certified Abbreviated Injury Scale Specialist (CAISS) to enhance injury coding in all centers
        - Certified Specialist Trauma Registries (CSTR) to prove competency in key aspects of the registrar role including data management, condition of injury, coding and scoring and overall registry issues.
- Consideration of a career ladder that supports knowledge advancement, based on level of experience, could enhance retention and job satisfaction. This could encourage more

senior registry staff to support programmatic and research missions and serve as a resource for less experienced staff members.
    - Example:
        - Certified Abbreviated Injury Scale Specialist (CAISS) within 2 years of hire – core work
        - Certified Specialist Trauma Registries (CSTR) within 3-5 years of experience/hire (especially in centers with academic and research missions)
- Consider that data abstractors maintain a minimum 90% data accuracy rate and/or a designated lead who is responsible for data validation maintain a minimum accuracy rate of 95%. We recommend that Level 3-4 centers with newer to practice registry staff consider formal relationships with higher level centers for mentorship to facilitate data abstraction accuracy (inter-rater reliability) when not within a system or network.

**4. Collaboration:**

- We advocate that state and national organizations partner clinicians with experienced trauma registrars when developing or modifying data definitions for abstraction to ensure feasibility, reduce ambiguity and improve reliability of accurate data abstraction.
    - State and National organizations should regularly review the data elements collected by trauma registrars to ensure they are relevant to the changing times.
- Interagency collaboration when providing continuing education to all disciplines within the trauma program should be considered. This partnership will foster relationships and facilitate a broader reach of inter-entity membership, thereby elevating trauma care both nationally and internationally.

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