

## Current Practice Patterns in Palliative Care for the Injured Geriatric Trauma Patient

### Overview:

The American Association for the Surgery of Trauma (AAST) Committee on Palliative Care together with the Geriatric and Critical Care Committees are conducting a retrospective multi-institutional snap-shot study, as approved by the AAST Multi-institutional Trial Committee, to assess variability of trauma center palliative care practice for geriatric trauma patients.

Despite advancements in care for trauma patients, a significant number of patients die in the hospital and many patients go on to have long-term functional impairments that profoundly impact their lives. Palliative care, defined as the care of patients and families with serious illness, can improve quality of life for patients and their families enduring life-changing illness. Palliative care interventions are associated with decreased ICU length of stay, earlier goals of care discussions and earlier decisions to limit life-sustaining treatments, without an impact on overall mortality.

Multiple studies have suggested underutilization of palliative care, often only applied in the last 24 hours of life when involved, despite ACS (American College of Surgeons) TQIP (Trauma Quality Improvement Program) Palliative Care Best Practice Guidelines. Given the known benefits of palliative care interventions for trauma patients, this study aims to evaluate the current end of life and palliative care practice patterns in trauma centers across the United States and Canada in order to further recognize specific areas for improvement.

**Aim:** The aim of this observational retrospective cohort study is to identify practice patterns of palliative care across the USA and Canada and evaluate adherence to national trauma guidelines (TQIP) for trauma patients over the age of 55.

### Primary Objectives:

1. The objective of this retrospective cohort study is to evaluate the current palliative care practice patterns for geriatric trauma patients (>55 years old) in level 1 and level 2 trauma centers for injured geriatric patients.

### Secondary Objectives:

1. To evaluate the utilization of processes in palliative care for geriatric trauma patients including 1) identification of healthcare proxy 2) identification of advance directive, 3) pre-hospital functional status or frailty assessment and 4) goals of care conversation.
2. To evaluate the frequency of primary versus specialist palliative care (board certified consultants) and to understand how their services are involved in end of life discussions and decisions for the geriatric trauma patient population.
3. To assess how palliative care processes impact patient and trauma center outcomes regarding intensity of care at the end of life including non-beneficial life support, trach placement, peg placement, mortality, length of stay, and discharge status or location.

### Planned Statistical Analysis:

Descriptive statistics will be used, with emphasis on graphical summaries such as heat maps, word clouds or other multivariate graphics, in order to provide an easily accessible way to understand trends, outliers, and patterns in the data. This will help us in identifying appropriate inferential techniques in making subject-centered decisions about possible interventions to increase palliative care utilization.

Hierarchical linear models will be used to account for within center correlation in the observations while identifying significant predictors of palliative care utilization and impact on intensity

of care at the end of life (i.e non-beneficial life-support, surgical interventions such as PEG placement etc).

#### Participation and Review:

We are looking for level 1 and level 2 trauma centers to contribute to our knowledge of current palliative care utilization across North America. Sites will be required to obtain IRB approval and sign a collaborative research agreement with the primary site. Please see additional components of the research packet for details.

#### Data Collection:

We are looking for individual sites to contribute completely deidentified retrospective data reviewing palliative care utilization practices at their hospital for all trauma patients > 55 years of age during two 2-week snap shot periods: June 6-June 19, 2021 and October 17-October 30, 2021. Data collection involves 9 institutional fields and 45 patient specific fields (see associated data sheet). Data can be directly uploaded into redcap, manually entered into redcap during data acquisition, or shared via encrypted excel files. Many of the fields directly correlate to fields already captured in the trauma registry. The total time to collect additional fields will depend on the ease of navigating the electronic medical system, but we anticipate 10 minutes total per patient for data abstraction and data entry.

#### Contact:

We eagerly look forward to your participation. Please contact our Research Fellow, Nicole Moraco, who is coordinating the study [Nicole.Moraco@lahey.org](mailto:Nicole.Moraco@lahey.org) with any clinical questions. For any questions relating to the Collaborative Research Agreement, please contact the Office of Sponsored Research [BILH\\_OS@lahey.org](mailto:BILH_OS@lahey.org) or Marc Bonarigo directly [Marc.Bonarigo@lahey.org](mailto:Marc.Bonarigo@lahey.org). The signed agreement should be forwarded to [bilh\\_osr@lahey.org](mailto:bilh_osr@lahey.org) for full execution by Lahey's authorized signing official. Please include a return email for a copy of the fully executed agreement to be delivered.