

Estimated Impact of Geriatric Trauma Triage on Statewide Hospital Admission Patterns

Unless otherwise noted, all data was derived from Ohio Trauma Acute Care Registry

With the adoption of the proposed geriatric trauma triage criteria, the Office of Research and Analysis was asked by the State Trauma Committee to estimate the effects these new criteria would have on hospitalizations of geriatric trauma patients.

This summary analysis was performed on the data in the Ohio Trauma Acute Care Registry (TACR) for trauma patients admitted in 2006. There were 32,703 records submitted to the TACR on trauma patients who met the TACR inclusion criteria. Of these, 5,090 (15.5%) were admitted to non-trauma center (NTC) hospitals. 3,127 of these patients (61.4%) were geriatric trauma patients, 70-105 years old. This was the population studied.

To determine which patients in the study population would have been triaged to a trauma center using the geriatric triage criteria, the records were filtered for the following:

- Injury of multiple body regions
- Traumatic brain injury (TBI) with a Glasgow Coma Score (GCS) less than 15
- Systolic blood pressure between 90 and 100 mmHg
- Pedestrian struck
- Femur or humerus fracture sustained in a motor vehicle crash (MVC)

Because of the limitations of the data set collected in the TACR, no separate filtering was done for the criteria of falls with evidence of TBI. It is assumed that most, if not all of these patients will be a subset of the TBI with GCS <15 population.

Of the 3,127 geriatric trauma patients in the study population, there were 742 with multiple body regions injured; 79 with a TBI and GCS <15; 109 with a systolic B/P between 90 and 100 mmHg; 10 pedestrians struck; and 6 with femur or humerus fractures sustained in an MVC. The total number of patients who would have been triaged to a trauma center under the geriatric triage criteria was 946, 30.2% of the study population. Overall mortality of these patients was 3.6%.

As there may have been patients who met more than one of the geriatric triage criteria these results should be considered a liberal estimate.

There were 83 NTC hospitals that admitted the geriatric trauma patients in the study population. This means the average NTC hospital in Ohio would have an average reduction of 11.4 admissions of severely injured patients annually.