

# FOCUS ON ISOLATED HEAD INJURY UNDERSCORES NEED FOR PROTOCOLIZED GERIATRIC TRAUMATIC BRAIN INJURY CARE

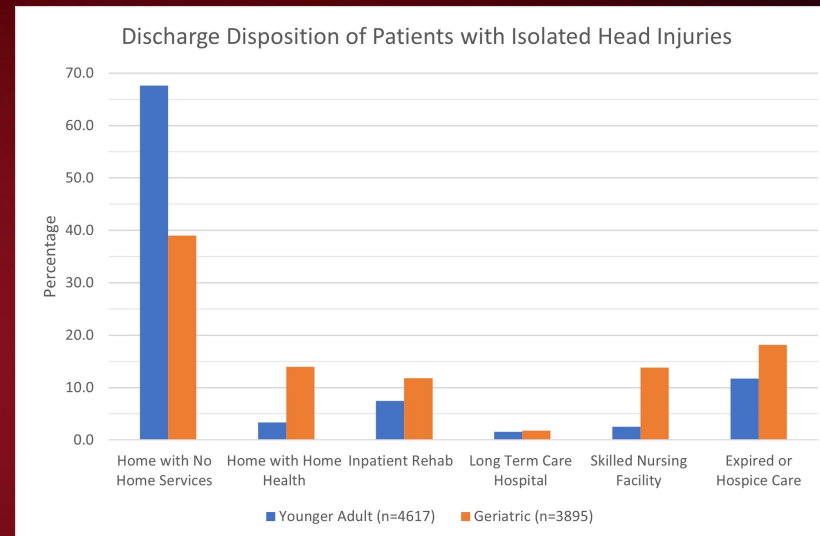
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## Objectives

- Trauma Quality Improvement Program (TQIP) national benchmark data for severe TBI outcomes are confounded by morbidity, mortality, and rehabilitation needs caused by extracranial associated injuries.
- Using data on isolated head injuries from the Georgia Quality Improvement Collaborative, the purpose of this study was to identify potential areas for patient-centered protocols that could optimize the care of patients with TBI.

## Methods

- All patients with severe TBI (Head Abbreviated Injury Score, AIS,  $\geq 3$ ) were collected from thirteen level 1 and 2 trauma centers in Georgia (Jan 2019-Dec 2021).
- Isolated TBI: excluded severe extracranial injuries, defined as AIS  $\geq 3$  injuries to the neck, chest, abdomen, pelvis, or extremities.
- Two cohorts: younger (age 15-64) vs geriatric (age  $\geq 65$ ) adults.



## Results

- 8512 patients included: 3895 geriatric and 4617 younger adults.
- Geriatric patients were more likely to be on anticoagulants (33.5 vs 4.8%), have dementia (21.8 vs 0.5%), and be functionally dependent at baseline (32.1 vs 3.9%).
- Geriatric patients mostly presented after ground level fall (78.0%); younger patients had varied mechanisms of injury (24.3% GLF, 28.3% MVC, 10.6% assault).
- Geriatric patients utilize more inpatient rehab (11.8 vs 7.5%), home health (14.0 vs 3.3%), and skilled nursing facilities (13.8 vs 2.6%).
- Of previously functionally independent geriatric patients (n=2644), 38.7% required post discharge services.
- Mortality difference driven by hospice transitions (8.7 vs 1.5%).

## Conclusions

- Isolated severe TBI presents in two distinct age cohorts.
- Geriatric patients are more likely to require post-discharge services, regardless of pre-injury functional status.
- **Streamlined protocols** should optimize inpatient management and place an early focus on goals of care discussions, informed by cohort-specific prognosis data.