

Approaches to Address Unmet Research Needs in Traumatic Brain Injury Among Older Adults: An Emergency Medicine Perspective



Kevin Biese, MD, MAT, FACEP
Chair, Geriatric Emergency
Department Accreditation (GEDA)
Geriatric Emergency
Department Collaborative (GEDC)
Implementation PI



Kevin Biese, MD, MAT, FACEP

Associate Professor of Emergency Medicine and Internal Medicine
University of North Carolina at Chapel Hill School of Medicine
West Health Policy Center Board Member

Disclosures:

Founder of Apogee Care
Consultant of ThirdEye Health

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Field Research

- Focus: ED perspective
- I conducted a series of interviews with neurocritical care trauma surgeons and ER physicians

Themes:

- Prognostication
- Dissemination and Implementation:
 - Systems of care to ensure equitable care delivery

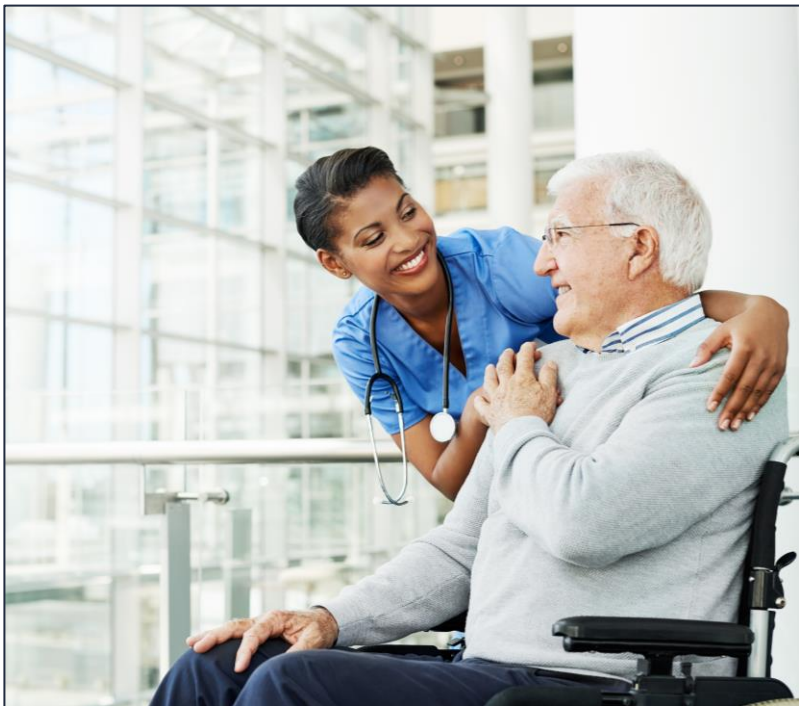


Jay's Story

- 68 yo with multiple medical comorbidities
- DNR/DNI status but still very functional
- Fall at home
- Walked into the emergency room independently
- Diagnosed with a small traumatic subarachnoid hemorrhage (SAH)
- Remained in the ER overnight due to no available hospital beds
- By the next day, patient required two-person assist for mobility
- Long rehab needed to recover as much from hospital stay as SAH
- No treatment needed for the small SAH



Prognosis for What Outcome?



- Defining "good outcomes" for older adults:
 - Focus on individual priorities and meaningful aspects of life
- Challenges with the Quality of Life After Brain Injury (QOLIBRI) questions:
 - May be difficult for older adults to answer accurately
- Proposed methodology for goal setting:
 - Interview older adults post-TBI to understand what they find meaningful
 - Use findings to guide goals of care conversations tailored to their values and preferences

Prognostication

(especially during ongoing capacity crisis)

- Criteria for emergent head CT
 - especially from SNF/ALF
 - Incorporate patient goals of care
- Level of care needed for TBI
 - considering patient goals of care and prognosis
- Follow-up for negative CT results:
 - Who requires it?
- Level of care/monitoring for hospital admissions
- Outlying rural hospital monitoring vs. transfer to neurosurgery center



Who Needs a Head CT?

- Canadian CT Head Injury/Trauma Rule & NEXUS
 - Exclude older adults
- East Trauma Guidelines:
 - “Future studies should also investigate whether subsets of patients with coagulopathy, advanced age....may safely avoid imaging after minor blunt head trauma.”
- Florida Geriatric Head Trauma CT Clinical Decision Rule – needs validation
- Blood-Based Biomarkers??
- Need decision rule using tele health – avoid harmful transfers



IMPACT: Traumatic Brain Injury Prognosis

- Management after a positive head CT
- Existing tools lack accuracy for older adults
- Focus on injury severity and age, not frailty
- Prognosis should account for baseline function, not just age
- Refine "favorable/unfavorable" outcomes to reflect the patient's personal goals and definition of favorable
- Critical to determine who gets transferred into trauma centers and what level of care needed



IMPACT

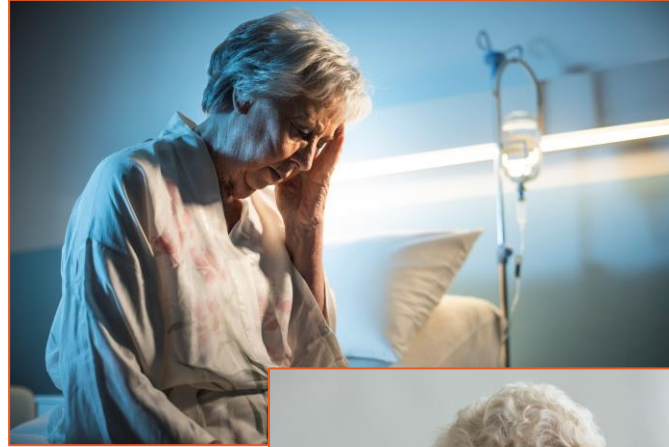
International Mission for Prognosis and Analysis of Clinical Trials in TBI

The Brain Injury Guidelines (BIG) and emergency department observation and admission rates: A retrospective cohort study

Lauren T Southerland ¹, Amar Alnemer ², Craig Laufenberg ³, Shahid M Nimjee ⁴, Jason J Bischof ³

What if the Head CT is Negative?

- Does cognitive rehab play a role in concussion?
- Who needs this to avoid downstream cognitive injury?
- Need to prioritize outpatient follow-up resources



Elevate the standard of care not just the cathedral of knowledge



Synergy: Geriatric EDs are Expanding with the Help of GEDC



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- University of California Health VA Healthcare
- Yale New Haven Health



157 GEDC Member Sites
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- Ensuring optimal transitions of care from the ED to other settings
- Promoting geriatric-focused quality improvement and enhancements of the physical environment and supplies

Thank You!



Kevin Biese, MD
kevin_biese@med.unc.edu

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