

Purpose: To provide a guideline for geriatric patients treated at the Ascension St. Vincent Evansville Trauma Center. Traumatic injury in the geriatric population is associated with higher mortality and morbidity rates compared with younger patients. Recognizing that the geriatric population has a unique set of needs, this guideline addresses the additional considerations of the geriatric population.

Definitions:

- A. The geriatric population is defined as ≥ 65 years of age
- B. Vulnerable geriatric patients are defined as
 - a. Patients ≥ 65 years of age and at least one of the following
 - i. Intracranial bleed
 - ii. > 3 rib fractures
 - iii. Pulmonary Contusion/Pneumothorax/Hemothorax
 - iv. Blunt Cardiac Injury
 - v. Pelvic Fracture/Long Bone Fracture
 - vi. Spinal Fracture with or without deficit (excludes spinous process fractures and thoracic/lumbar transverse process fractures)
 - vii. And at least one of the following conditions
 - 1. GFR < 45
 - 2. On Anticoagulant (exclude ASA)
 - 3. Arrhythmias or Ejection Fraction $\leq 40\%$
 - 4. Cirrhosis
 - 5. Alcohol Dependence
 - 6. Baseline home oxygen
 - 7. BMI ≥ 50
 - 8. Diabetes Mellitus
 - 9. Syncope
 - 10. Polypharmacy
 - 11. Frequent falls

Guideline:

- A. Initial Stabilization Care Considerations
 - a. Resuscitate per ATLS protocols
 - b. Consider acute or chronic medical conditions, medications that may contribute to presentation
 - 1. Reversal as appropriate
 - c. Lab assessment
 - i. Consider
 - 1. CBC
 - 2. CMP
 - 3. Lactic Acid or ABG for baseline base deficit

4. PT/PTT/INR
5. ETOH/Toxicology Screen
6. Troponin as appropriate
7. Type and Screen
8. Urinalysis

d. Imaging as appropriate based on assessment

B. Management After Initial Stabilization

a. Obtain geriatric specialist consultation (or Hospitalist) for patients who are deemed vulnerable or per Surgeon discretion.

b. Geriatric Consult Expectation

i. Role:

1. Assist with tertiary survey - evaluate in detail the medical issues that may have caused the trauma presentation.
2. Reconcile home meds
3. Manage active co-morbid conditions and complications.
4. Manage poly-pharmacy utilizing Beers Criteria
5. Assist in prevention and management of delirium.
6. Assist with advanced directives
7. Assist with plan for transition to post-hospital care including possible post-discharge clinic and discharge medication reconciliation.
8. Dementia Screen
 - a. Not required in patients with known clinical diagnosis. Document any recommended changes with current regimen if appropriate
 - b. Screen patients with clinical concern for undiagnosed dementia
9. Collaborate with the multidisciplinary care team

C. Additional Consultations

a. Case Management/Social Work

1. Discharge planning
2. SBIRT
3. MH screening

b. Physical and Occupational Therapy

c. Speech Therapy if

1. Head injury/cognitive impairment or
2. C-collar for treatment of injury, cervical spine surgery or
3. History of swallowing difficulty

d. Dietician Consult

e. Consider Palliative Care Consult for

1. Family support
2. Poor prognosis
3. Assistance with end of life wishes, code status, POLST form

D. ICU Admission for Patients with

- a. Multi-system injury with probability of decompensation/high burden of injury
- b. > 3 rib fractures, sternal fracture, and/or hemopneumothorax
- c. Need for blood products
- d. Spinal cord injury
- e. TBI
- f. Multiple long bone fractures, pelvic fractures, and/or open fractures
- g. Hypotension (SBP <100)
- h. Significant injury to one or more organ systems
 - i. Base deficit > -6 or Lactate > 2

E. Pain Management

- a. Use elderly-appropriate dosing
- b. Avoid benzodiazepines
- c. Monitor use of narcotics
- d. Consider non-narcotic medications
- e. Consider epidural analgesia

F. Mobility Screening

- a. Refer to
 - i. RN to complete Mobility Daily Risk Assessment
 - ii. Mobilization as soon as cleared for activity
 - iii. Consider early mobility for ICU patients

G. Fall Prevention

- a. RN to complete Morse Fall Scale
- b. Refer to Hospital Policy 14553897 Fall Prevention

H. Skin Assessment

- a. Complete Braden score and implement interventions per Hospital policy

I. Non-Accidental Trauma (a/k/a Elder Abuse)

- a. Refer to Hospital Policy 11263504 Endangered Adult

J. Prevention, Identification and Management of Delirium

- a. Assess for delirium in ICU and medical surgical units using CAM score
- b. Evaluate and address delirium risk factors
 - i. D: Drugs/Medications/Polypharmacy
 - ii. E: Electrolytes, Environmental factors (hearing aids, glasses, etc.)
 - iii. L: Lack of drugs (withdrawal), Lack of sleep, Low Oxygen (or high PCO₂)
 - iv. I: Infection, Immobility, Iatrogenic (surgery)
 - v. R: Restraints, Reduced sensory input, Retention (urinary/stool)
 - vi. I: Intracranial (stroke, bleed, seizure, meningitis)
 - vii. U: Uncontrolled pain, Underhydration/Undernutrition
 - viii. M: Metabolic (electrolytes, uremia, hepatic encephalopathy)
- c. Management
 - i. Ensure adequate pain management and minimal amounts of sedation
 - ii. Orient to surroundings
 - iii. Have familiar objects at bedside
 - iv. Encourage family involvement
 - v. Early mobilization

- vi. Decrease excess noise stimuli
- vii. Lights on during the day and off during the night
- viii. Review MAR for medications associated with delirium
- ix. Fall Prevention strategies

K. Prevention, Identification and Management of Depression

a. Prevention

- i. Encourage patient to be active
- ii. Communicate with patient and provide reassurance, comfort, and encouragement
- iii. Encourage decision-making and participation in the plan of care
- iv. Encourage family participation
- v. Provide stimulation and interaction
- vi. Consider the patient's physical, emotional, social, and spiritual needs
- vii. Give the patient time to respond to questions and requests
- viii. Speak calmly and give clear and concise explanations about care and treatment

b. Assess for depression

- i. SW to complete PC-PTSD5

L. Patient Decision-Making and Care Preferences

- a. The patient's condition and prognosis should be clearly discussed with the patient and the family
 - i. Document in EMR
- b. Identify pre-existing advance directives of trauma patient upon admission per Hospital policy
- c. Consider Palliative Care consult to assist

M. Discharge Planning

- a. Social Services consult with collaboration of interdisciplinary team

Geriatric Trauma Consultation Algorithm

Patient ≥ 65 years of age and at least **one** of the following:

1. Intracranial bleed
2. > 3 rib fractures
3. Pulmonary Contusion/Pneumothorax/Hemothorax
4. Blunt Cardiac Injury
5. Pelvic Fracture/Long Bone Fracture
6. Spinal Fracture with or without deficit (excludes spinous process fractures and thoracic/lumbar transverse process fractures)

↓ **and**

Patient has at least **one** of the following medical conditions:

1. GFR < 45
2. On Anticoagulant (exclude ASA)
3. Arrhythmias or Ejection Fraction $\leq 40\%$
4. Cirrhosis
5. Alcohol Dependence
6. Baseline home oxygen
7. BMI ≥ 50
8. Diabetes Mellitus
9. Syncope
10. Polypharmacy
11. Frequent falls

↓
Consult Hospitalist

Reason for consult: Geriatric Trauma Management

↓
Geriatric Trauma Management Consult will:

1. Assist with tertiary survey - evaluate in detail the medical issues that may have caused the trauma presentation
2. Reconcile home meds
3. Manage active co-morbid conditions and complications
4. Manage poly-pharmacy utilizing Beers Criteria
5. Assist in prevention and management of delirium
6. Assist with advanced directives
7. Assist with plan for transition to post-hospital care including possible post-discharge clinic and discharge medication reconciliation
8. Collaborate with the multidisciplinary care team

*****Geriatric Trauma Management Consult will be performed by hospitalist, NP or IM resident in collaboration with hospitalist, or by geriatrician if and when available**

References:

- ACS TQIP Geriatric Trauma Management Guidelines
- Lilley EJ, Cooper Z, Schwarze ML, Mosenthal AC: Palliative care in surgery: Defining the research priorities. Ann Surg. 2018 Jan;267(1):66-72.
- Sharma J, Parulekar M, Stewart P, Blatt M, Zielonka T, Nyirenda T, Rogers C, Tank L. Geriatric Consultation Reduces High-risk Medication Usage at Discharge in Elderly Trauma Patients. Cureus. 2018 Nov 28;10(11):e3649. doi: 10.7759/cureus.3649. PMID: 30723648; PMCID: PMC6351116.
- ACS TQIP Guideline Palliative Care
- Prins JTH, Wijffels MME, Pieracci FM. What is the optimal timing to perform surgical stabilization of rib fractures? J Thorac Dis. 2021 Aug;13(Suppl 1):S13-S25. doi: 10.21037/jtd-21-649. PMID: 34447588; PMCID: PMC8371546.
- Optimal Resources for Geriatric Surgery: 2019 Standards May 1, 2019. American College of Surgeons https://www.facs.org/media/u4jf5j3k/geriatricsv_standards.pdf
- Ward K, Reuben D. Comprehensive Geriatric Assessment. UpToDate Dec. 2022, <https://www.uptodate.com/contents/comprehensive-geriatric-assessment>

Review/Revision History:

Review/Revision Date:	Approved by:
Created 05/24	Trauma Services
	Trauma Services
	Trauma Services