

## Ortho Trauma Admission Guidelines:

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### I. Definition:

**Isolated** orthopaedic injuries include those injuries confined to the extremities/pelvis that consist primarily of bone and joint involvement that require surgical intervention. This may include extremity injuries with significant bone or joint involvement with associated soft tissue injuries that do not require skin grafting or free flaps.

### II. Exceptions:

- a. 2 or more long bone fractures (femur, tibia, humerus)
- b. 1 long bone + pelvis injury (not including pubic rami)
- c. Bilateral acetabulum fractures
- d. Unilateral acetabulum fracture in geriatric population (>70).
- e. Moderate and severe pelvis injury
  - i. Classification and determination of severity of pelvic ring injury at the discretion of the orthopaedic consultant.
  - ii. Examples include: any vertical shear, open book, APC II-III, LC II-III
- f. Any long bone or pelvis injury requiring blood transfusion as part of initial resuscitation
- g. Hemodynamically unstable after initial resuscitation (continued hypotension, blood product transfusion more than 2 hours after admission, or arterial lactate  $\geq 4$ )

### III. High Risk Definition:

- Cardiac disease (MI within last 6 months, untreated CAD, CHF)
- COPD requiring home oxygen
- Significant Liver disease (MELD  $>20$ )
- ESRD
- Coagulopathy (including home anticoagulation, not ASA)

### IV. Process/Algorithm:

- a. If patient has polytrauma or isolated ortho exclusions, Trauma will admit.
- b. If meets isolated ortho definition, assess for high risk comorbidities
- c. If patient has at least one high risk comorbidity (as above), Trauma will admit.
- d. If patient does not have high risk comorbidity, admission per Ortho trauma service.
- e. If patient meets Ortho Trauma admission, they will determine appropriate admitting service (Ortho trauma vs geriatric/internal medicine)

### V. Isolated ortho trauma with instability

- a. If the patient is hemodynamically unstable (requiring blood in the ED), patient will be admitted to the Trauma service for 24 hours.
- b. If the patient has stabilized hemodynamically (normotensive, normal (or normalizing) lactate and oxygen saturation greater than 92% on room air) at 24 hrs after admission, the patient will transfer to the Ortho Trauma service (Ortho Trauma team contacted in order to verify acceptance of transfer and whether or not further review with attending is indicated).

- c. If the patient remains hemodynamically unstable 24 hours after admission, the patient will remain on the trauma service until discharge.
- d. Transfers will occur during daytime hours (between 8am and 5pm) and after Trauma and Ortho Trauma teams have evaluated the patient on morning rounds. Weekend transfers may require Ortho Trauma attending review and verification.

**VI. New or missed injuries:**

- a. Trauma will evaluate urgently and determine need for transfer back to the Trauma service in discussion with Ortho Trauma team.

**VII. Clinical Decline Pathway:**

- a. Any Ortho Trauma patient originally admitted to Trauma that experiences clinical decline and requires transfer to higher level of care (ICU or stepdown unit), patient will be transferred back to the Trauma service (Trauma team will be notified, but no attending approval needed).

**VIII. Approvals:**

- a. No additional attending approvals required for transfers to Ortho Trauma or back to Trauma if patient meets criteria. Communication between Trauma and Ortho Trauma will take place for all transfers. This facilitates efficiency of care and allows for more seamless transitions of care.

Reviewed By:

Brad Dennis, MD

Oscar Guillamondegui, MD

Alex Jahangir, MD

Robert Boyce, MD

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## Algorithm for Ortho Trauma Admissions

