Ortho Trauma Admission Guidelines:

I. Scope:
This guideline will only apply to patients arriving to VUMC as level 1 or level 2 trauma activations.

II. Definition:

Isolated orthopedic 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.

Patients with operative fractures who require soft tissue reconstruction/coverage will be admitted to the Orthopedic Surgery Service.

III. Exceptions:

a. 2 or more long bone fractures (femur, tibia, humerus)
b. 1 long bone + bony pelvic injury excluding pubic rami
c. Bilateral acetabulum fractures
d. Unilateral acetabulum fracture in geriatric population (>70).
e. 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, >2 units)

IV. High Risk Definition:
Cardiac disease (MI within last 6 months, active myocardial ischemia, CHF)
COPD requiring home oxygen
Significant Liver disease (MELD >20)
ESRD on dialysis
Coagulopathy (including home anticoagulation, not ASA)

V. 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)
VI. **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 via the transfer pathway below.
   
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.

VII. **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.

VIII. **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).

IX. **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.

X. **Service Transfer**
   a. Patients who meet criteria to be transferred from the Trauma Service to the Orthopedic Surgery service will proceed via the following:
      i. Notification and placement of orders must occur before 12 noon
      ii. Notification via E-star paging from Trauma Service
      iii. Transfer Summary complete and in E-Star
      iv. Trauma Team will then place transfer orders and change primary service in E-star

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Algorithm for Ortho Trauma Admissions

Level 1 or 2 trauma activation

Isolated Ortho by criteria (See Definitions)

- YES
  - High Risk?
    - NO: Admit per Ortho Trauma recommendations
    - YES: Admit to Trauma Service

- NO: Admit to Trauma Service

Hemodynamically stable on morning rounds and >24 hours after admission

- YES: Transfer to Ortho Trauma Service
- NO: Remain on Trauma service until discharge

*Approvals:
No additional attending approvals required for transfers to Ortho Trauma or back to Trauma if patient meets criteria.

Transfers will occur between 8AM and 5PM.

Weekend transfers may require Ortho Trauma attending verification and review prior to transfer.

**Clinical Decline:
Any patient admitted to trauma initially who clinically declines can be transferred back to the Trauma service if requiring higher level of care.

***New/missed injuries:
Trauma will evaluate urgently and determine need transfer back to Trauma service