Partnering to Prevent Falls: Rehabilitation Strategies for Geriatric Trauma and Hip Fracture Care

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Objectives

Main objective : Describe rehabilitation strategies and interprofessional approaches to reduce fall risk and improve outcomes in older adults following trauma and hip fractures.
Additional Learning Objectives:

1) Identify prevalence of hip fractures and falls amongst the elderly and risk factors that contribute to these events.
2) Understand screening tools and outcome measures to assess fall risk in the elderly during inpatient admission.
3) Describe each profession's role in decreasing a patient's fall risk during and post inpatient hospital stay.
4) Acknowledge STEADI steps (screen, assess, intervene) to create an action plan for fall prevention during and after inpatient stay.

Prevalence of Falls in the Elderly

- 1 in 4 adults ≥65 fall each year
- 95% of hip fractures result from falls
- 20–30% 1-year mortality after hip fracture
- 50 billion dollars annually spent for fall related admissions
- Older adults admitted to the hospital are more likely to fall 1 month post DC than those who are not hospitalized

Trauma Burden & Hospital Impact

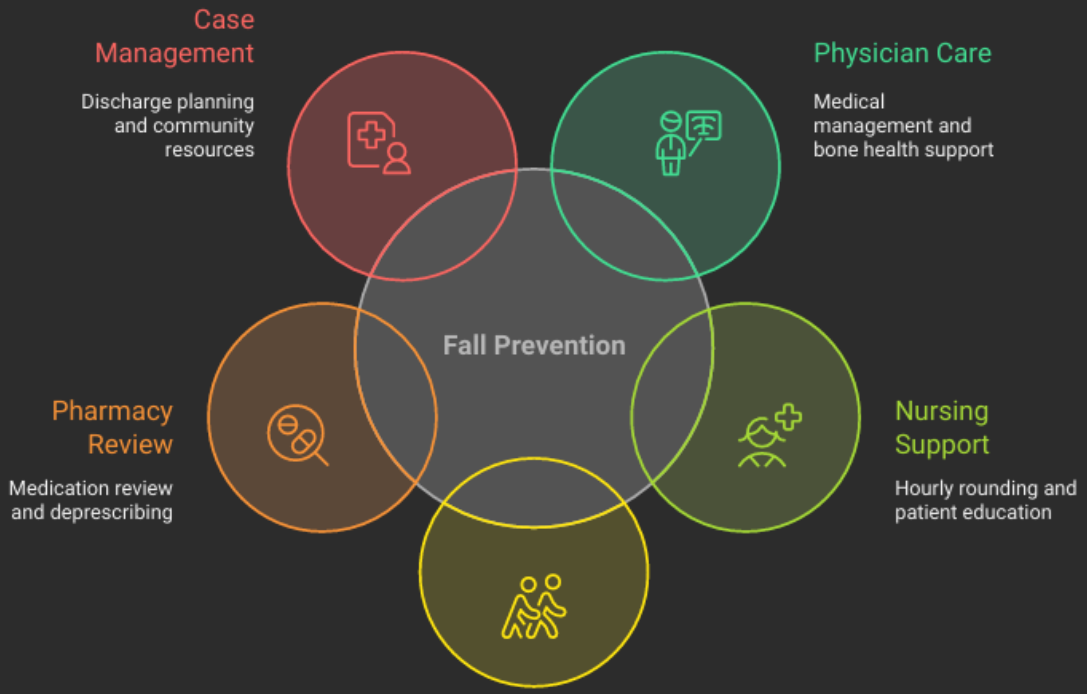
- 60% of geriatric trauma admissions = falls
- 300,000+ hip fracture hospitalizations annually
- 1 in 4 readmissions within 30 days after hip fracture
- Functional decline = loss of independence, higher care needs, mobility limitations

Who Is at Risk?

Intrinsic	Extrinsic
- Advanced age - Multiple comorbidities - History of falls - Impaired gait/balance - Poor vision - Fear of falling	- Home hazards - Footwear issues - Improper assistive device use - Poor lighting - Polypharmacy - Psychoactive meds

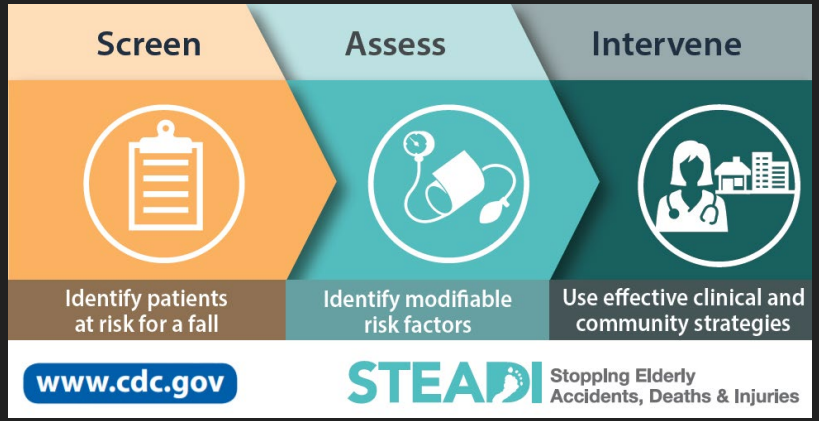
- More risk factors = higher fall risk
- Most risk factors are modifiable

Comprehensive Fall Prevention Team



Hospital Fall Prevention Framework

- **STEADI Framework:** Screen > Assess > Intervene
  - Standardized workflow across nursing, rehab, physicians, pharmacy, and case management
  - Promotes early mobility & safe discharges
  - Helps reduce 30-day readmissions



Step 1: Screen - Identifying Fall Risk Early

- What screening is:
  - Quick process performed by most healthcare team members
  - Identifies patients who may be at risk for falling & need further assessment
- What UMC uses:
  - Morse Fall Risk Scale
    - Fall history, comorbidities, gait deficits, assistive device use, IV lines, mental status
- Precautions triggered by screening results:
  - Color-coded socks: Green (low), Yellow (moderate), Red (high)
  - Bed/chair alarms for high-risk patients
  - “Call, don’t fall” patient education

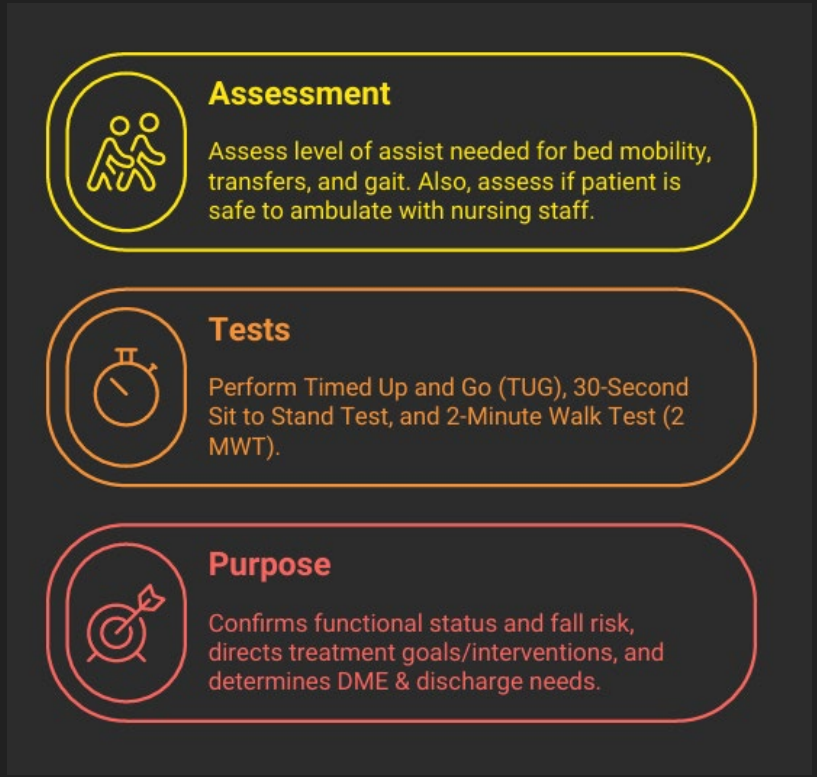
Fall Risk Screening

- Why screening matters:
  - Identifies at-risk patients *before* a fall
  - Guides safety precautions & rehab referrals
  - Helps prevent inpatient & post-discharge falls
- Common screening tools
  - Stay Independent Checklist: 12-item questionnaire using in outpatient or primary care settings
  - STRATIFY: 5-item tool that predicts inpatient fall risk
  - Morse Fall Risk Scale: UMC’s standard screening tool

Step 2: Assess

- **Identify patients at high risk:** multiple medications, >1–2 comorbidities, history of falls, advanced age, or mobility-altering diagnoses/procedures.
- **Mobility-related orders are updated as patients stabilize**, including adjusting bedrest or IV/O2 needs to support safe movement.
- **Rehab documentation includes updated Morse Fall Risk scores** visible to nursing for coordinated fall prevention.
- **PT/OT evaluation determines** discharge plan, DME needs, and continued services (HHPT or outpatient PT).

Functional Assessments Used by Rehab



New Unit Initiative: BMAT on Thomason Tower 5 (Ortho Unit)

Basic mobility assessment tool (BMAT)

- Allows nurses to screen mobility and assist in fall prevention
- Can be done prior to PT eval to avoid consequences of immobility
- Places patient in a mobility level to determine level of assist needed

BMAT Mobility Levels

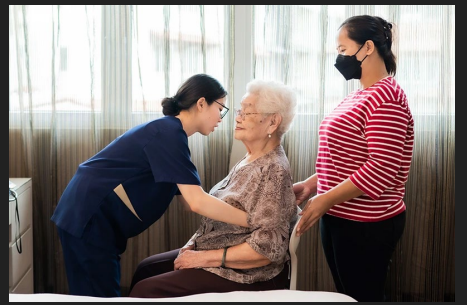
Level 1: Sit & Shake	Dependent	Hoyer/ceiling lift
Level 2: Stretch & Point	Moderate Assist	Sit to stand device
Level 3: Stand	Minimal Assist	Gait belt, walker
Level 4: Walk & March	Independent	“Call, don't fall.”

Step 3: Intervene - Addressing Modifiable Risk Factors

- Medication-related fall risk
  - Coordination between pharmacy/physician to deprescribe, switch to safe alternatives, or adjust dosage when possible
- Vision & footwear issues
  - Ensure appropriate eyewear; encourage single-distance lenses
  - Supportive/well-fitted footwear; non-slip socks
  - Refer to optometry/podiatry as needed
- Home/environmental hazards
  - Provide home safety education
  - OT home evaluation
- Vitamin D Deficiency & comorbidities
  - Optimize medical treatment
  - Consider vitamin D supplementation

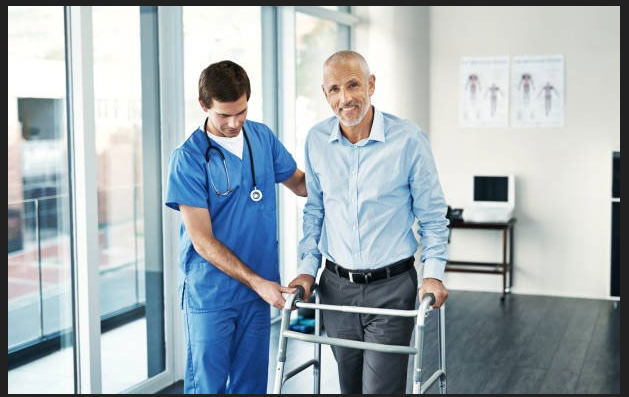
Intervene - Rehabilitation Strategies

- Acute care rehab
  - Coordinate with nursing and medical/surgical teams for WB status; discontinue bedrest orders
  - Early mobilization after trauma/hip fracture
  - PT/OT intervention: functional mobility, balance, gait training
  - Assistive device fitting and training
- Patient & caregiver education
  - Home exercise program
  - Safe mobility and transfer techniques
  - Caregiver training for safe assistance
- Discharge planning
  - Collaborate with case management/medical team on DME needs & home modifications
  - Ensure continuity of care: Inpatient rehab, home health or outpatient PT
  - For higher level patients: provide fall prevention education & referral to community programs (Tai Chi, Silver Sneakers, Senior Center Programs)



Conclusion/Key Takeaways

- Falls in older adults are predictable and preventable
- Trauma & hospitalization significantly increase fall risk
- Early screening, assessment, and teamwork = better outcomes/fewer falls
- Rehab plays a critical role in restoring mobility and safety
- STEADI provides a clear, evidence-based roadmap for inpatient and post-discharge fall prevention



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