FACING THE FACTS ABOUT FALLS IN HOSPITALS

1. **SIGNAGE ALONE DOES NOT INFLUENCE CARE.** No evidence exists that care is differentiated based on the presence of high risk signage, wrist bands or colored socks. (Spolestra et al 2012)

2. **SCORE BASED INTERVENTION BUNDLES ARE NOT EFFECTIVE** in preventing falls. (Oliver et al 2010) Are you treating a score or a patient with individual risk factors?

3. **ALL FALLS ARE NOT EQUAL** — unassisted falls are associated with injury. Assisted falls usually do not result in harm and should not be treated as a failure. (Staggs et al 2014)

4. **FORCED IMMOBILITY IS CAUSING HARM** and contributes to delirium, functional decline and new walking dependence in elders. 16-59% of elders are impacted by new walking dependence post hospitalization (Hirsh 1990, Lazarus 1991, Mahoney 1998)

5. **DELIRIUM IS THE LEADING CONTRIBUTOR OF FALLS.** Delirium occurs in 29-64% of hospitalized elders and is the leading contributor to hospital falls (Inouye et al 2014). Delirium increases risk of falling 4.55 times. (Pendelbury et al 2015) Interventions targeting delirium prevention can reduce falls by 64%. (Hshieh et al 2015)

6. **BED ALARMS CAUSE MORE HARM THAN GOOD** including alarm fatigue, forced immobility and patient dissatisfaction. There is no evidence that they reduce falls. (Shorr et al 2011)

7. **THE TERM NON-COMPLIANT IS OVER USED.** 50-88%of patients do not believe they are at risk for a fall in the hospital. (Twibell et al 2015, Sonnad et al 2014) Evidence supports that structured education about risk and consequences can reduce falls and injuries by 45-100% with cognitively intact patients. (li-Chi Huang 2015, Haines et al 2011)

8. **NURSING ALONE CANNOT REDUCE FALL RELATED INJURIES** and support safe mobility. Organizations that take a whole house approach accelerate improvement. (Miake-Lye et al 2013)

9. **MEDICATIONS ARE THE EASIEST RISK FACTOR TO MODIFY.** Other risk factors: advanced age, previous falls, muscle weakness, gait and balance issues, postural hypotension and chronic conditions are much more difficult to modify.

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WHAT TO STOP DOING TO START IMPROVING

STOP	START	INTERVENTIONS | STRATEGIES
Relying on a Fall Risk Score for Action	> Focusing on identifying risk factors for falls and injury and activating interventions for each risk factor	> Identify high risk or vulnerable populations that will receive a multifactorial assessment. For example: » Admitted for a fall » History of a fall » Risk for injury » Age based to capture elders > Develop triggers for more in-depth assessment » Assess mobility on admission, select criteria for referral to rehab » Develop criteria for medication review » Screen for delirium > Screen for Injury Risk using ABCS > Encourage application of critical thinking and clinical judgement in determining fall risk factors > Implement interventions for each modifiable risk factor > Communicate the tailored interventions via bedside signage or whiteboard
Use of bed alarms and sitters to restrict mobility	> Support the patient's highest level of mobility at least 3 times a day > Integrate delirium detection, prevention and management plans for elders	> Mobilize patients safely » Use Accelerometers or step tracking device to record patients' mobility » Place distance markers on walls around units » Document mobility » Clearly identify staff to assist with scheduled ambulation; use sitters, volunteers, mobility techs » Train nursing staff on safe patient handling and have mobility equipment accessible > Detect, Prevent and Manage Delirium » Assess for delirium » Discontinue tethers » Mobilize 3 x day » Minimize CNS affecting meds and anticholinergics » Support hydration
Relying only on walking	> Optimize functional mobility in bed and chair and, provide progressive mobility and exercises	> Passive and active ROM > Functional Mobility: bed mobility, sitting on side of bed, sit-to-stand, standing, marching in place > In bed cycle – UE and LE > Beach chair positioning

HRET HIIN FALLS MYTH BUSTING: WHAT TO STOP DOING TO START IMPROVING

STOP	START	INTERVENTIONS | STRATEGIES
Talking at Patients or Telling patients what to do	> Engage Patients as Partners in safely mobilizing > Teach risks, consequences of a fall and strategies to prevent	> Use Teach Back to assess understanding of personal risk factors, consequences of a fall, and precautions to take to prevent a fall or injury > Provide structured falls education provided by a designated member of the care team > Use a "Fall Agreement" signed by patients and staff and post at bedside
Believing you cannot afford to resource a mobility program	> Train sitters and aides to ambulate patients > Use the most appropriate level of staff to mobilize patients	> Develop ROI based upon current rates of harms and employee lifting injuries and expected harm reductions > Train volunteers and aides to perform mobility tasks to be good stewards of PT and Nursing resources
Targeting nursing alone to prevent fall related injuries	> Leadership is visibly supportive in removing barriers and learning from data > Interdisciplinary collaboration in mobility and medication risk factors > Ancillary departments maintain a safe environment	> Leader attends post fall huddle or visits patient post fall > Falls discussed with staff in leadership rounds to identify opportunities > Falls are included in leadership safety huddles > Train all staff on fall precautions and establish a "do not pass zone" > Leadership assures the safest environment is achieved and maintained > Interdisciplinary safety / hazard rounds, clutter rounds > Focus RCAs or huddles on unassisted falls and falls with injury to identify patient level and system level contributing factors that can be remedied to prevent future falls

EVIDENCE

Staggs, V. S., Mion, L. C., & Shorr, R. I. (2014). Assisted and Unassisted Falls: Different Events, Different Outcomes, Different Implications for Quality of Hospital Care. *Joint Commission Journal on Quality and Patient Safety / Joint Commission Resources, 40*(8), 358–364. Retrieved at: Free full article

Spoelstra, Sandra L.; Given, Barbara A.; and Given, Charles W., "Fall Prevention in Hospitals: An Integrative Review" (2012). Peer Reviewed Articles. Paper 28. Retrieved at: Free full article

Oliver D, Healey F, Haines TP. Falls and fall-related injuries in hospitals. *Clinics in Geriatric Medicine.* 2010.26: 645-692. Retrieved 12/31/17. Free full article

Pendelbury S, Lovett N, Smith S, Dutta N, Bendon C, et al. Observational, longitudinal study of delirium in consecutive unselected acute medical admissions: age-specific rates and associated factors, mortality and re-admission. *BMJ Open.* 2015:5. Retrieved 12.31.17. Free full article

Hshieh T, Yue J, Puelle M, et al Effectiveness of multicomponent nonpharmacological delirium interventions: a meta-analysis. *JAMA Intern Med.* 2015 Apr;175(4):512-20. Retrieved 12.31.17. Pub med link

Mahoney J, Sager M, Jalaluddin M. New walking dependence associated with hospitalization and acute illness: incidence and significance. *J Gerontol A Biol Sci Med Sci.* 1988 Jul:53(4):M307-12. Retrieved 12/31/17. Pub med link

Lazarus, B. A., Murphy, J. B., Coletta, E. M., McQuade, W. H., & Culpepper, L. (1991). The provision of physical activity to hospitalized elderly patients. *Archives of Internal Medicine, 151*, 2452–2456. Retrieved 12.31.17. Pub med link

Hirsch, C., Sommers, L., Olsen, A., Mullen, L., & Winogard, C. (1990). The natural history of functional morbidity in hospitalized older patients. *Journal of the American Geriatric Society, 38*, 1296–1303. Retrieved 12.31.17. Pub med link

Sonnad S, Mascioli S, Cunningham J, GoldsackJ. Do patients accurately perceive their fall risk? *Nursing.* 2014 Nov:44(11):58-62.Retrieved 12/30/17: Pub med link

R. S. Twibell, D. Siela, T. Sproat, G. Coers. Perceptions Related to Falls and Fall Prevention Among Hospitalized Adults. *American Journal of Critical Care*, 2015; 24 (5): Retrieved 12/30/17. Pub med link

Li-Chi Huang, Wei-FenMa, Tsai-Chung Li, Yia-Wun Liang Tsai, Fy-Uan Chang. The effectiveness of participatory progam on fall prevention in oncology patients. Health Educatin Research. April:30(2) 298-308. Retrieved 12/30/17. Free full article

Haines T, Hill A, Hill K et al. Patient Education to Prevent Falls Among Older Hospital Inpatients. *Arch Intern Med.* 2011:17(6):516-524. Retrieved 12.30.17. Free full article

Shorr R, Chandler A, Mion L, Waters T, Liu M, Daniels M, Kessler L, ,Miller, S.T. (2012). Effects of an intervention to increase bed alarm use to prevent falls in hospitalized patients. A cluster randomized trial. *Annals of Internal Medicine, 157*, 692–699. Retrieved 12.30.17. Free full article

Miake-Lye IM, Hempel S, Ganz DA, Shekelle PG. Inpatient fall prevention programs as a patient safety strategy a systematic review. *Ann Intern Med.* 2013 Mar 5;158(5 Pt2). Retrieved 12.30.17: Free full article

RESOURCES

PATIENT CENTERED CARE / INJURY PREVENTION RESOURCES

Risk and Care Planning tools

- NICE Multifactorial Fall Risk Assessment and Management Tool
- Fall TIPS© Risk Screening and care plan tool
  - Article
  - Fall TIPS Webinar: How to Implement on your unit
- Fall and Injury Screening, Assessment and Intervention Algorithm

Injury Risk Assessment

- Safe From Falls Roadmap – Anticogualtion
- ABCS Injury Risk Assessment

Injury Mitigation

- Floor Mat Resource and Implementation Guide

SAFE MOBILIZATION RESOURCES

Mobility Assessments

- Banner Mobility Assessment Tool for Nurses (BMAT) viceo and Tool
- Timed Get up and Go Test
- Get Up and Go Test

Mobility tools

- Walk of Fame Mobility Board
- CAPTURE Falls mobility training videos, mobility tools
- Activity tracker article

Thought Provoking Articles

- False Bed Alarms a Teachable Moment
- The Tension Between Promoting Mobility and Preventing Falls in the Hospital
- The Frances Healey Reader: Key ideas and references

Mobility Protocols and Resources

- Med Surg Mobility Protocol
- ICU Mobility Protocol
- Beach Chair Positoning Article

Delirium Assessment Resources

- ICU LIberation - Delirium and Mobility Resources
- Hopsital Elder Life Program (HELP) for the Prevention of Delirium

Medication Review Resource

- British Geriatric Society: Medicines and Falls in the Hospital Guidance Sheet
- AHRQ Medication Fall Risk Score and Evaluation

PATIENT AND FAMILY ENGAGEMENT RESOURCES

- Anticoagulation Teach Back Tool
- Teach Back Tool for Fall Prevention
- Teach Back Event Recording
- Fall Tips for Patient and Families Handout
- Patient Agreements:
  - Intermountain Health Patient Agreement
  - Cox Health Fall Prevention Partnership

INTERDISCIPLINARY RESOURCES

- Guide: Creating a Safe Environment to Prevent Toileting Related Injuries
- No Pass Zone Resources:
  - Sample Peer General No pass zone video
  - Sample Peer Intro Video for Leadership
  - Generic Non-clinical training video
  - All Staff video from HRET Critical Thinking Video Series: Critical Thinking Video Series

DEVELOPING A BUSINESS CASE FOR MOBILITY

- Financial modeling for mobility program: https://www.ncbi.nlm.nih.gov/pubmed/23318489
- ROI tool forthcoming