Falls Improvement Action Network

IN-PERSON WORKSHOP MAY 17, 2018



Illinois | Michigan | Wisconsin
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Goals for Today

- Take another dive into clinical falls content
- Evaluate your identified process gaps to create individualized, concrete next steps to improve your approach to preventing injuries from falls and immobility.
- Learn how to use several performance improvement tools to quickly identify drivers for improvement



Agenda

- Introductions
- Preventing Harm from Falls and Immobility
 - Jackie Conrad, RN, MBA; Cynosure Health
- Break
- Improvement Workshop
 - Developing an Aim Statement
 - Driver Diagrams as a Plan for Change
- Final Thoughts



Who's here?



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Preventing Harm from Falls <u>AND</u> Immobility

JACKIE CONRAD RN, MBA, RCC™ CYNOSURE HEALTH



Lets start where we are





Donabedian's Quality Framework



Characteristics of Organizations and Staff

- Interdisciplinary
 - Leadership
 - Environment
- Staff Engagement & Education
- Learning from data

What is done to the Patient

- Risks assessed
 - Plans made
- Plans executed

What happens to the Patient

Patient is mobilized safely



Structure Gap Analysis Results

Interdisciplinary Team

- 82% Interdisciplinary
- 21% have MD
- 71% Rehab
- 44% Facilities
- 12% Dietary
- 21% Patient Representative

Learning from Data

- 91% Analyzing data for trends
- 97% Sharing falls in daily safety briefings with leadership

Education

- 97% Annual fall education
- 76% Nursing staff trained annually on safe mobility
- 85% PT able to eval / treat high risk pts



Gap Analysis Results

- Fall risk assessed
 - 100% On admission
 - 92% Every shift
 - 97% After fall
 - 77% Change in condition
 - 44% are capturing antithrombotic use as part of injury risk assessment
- Injury Risk Assessment– ABCS

Fall Risk Communicated

- 94% At handoff
- 100% Visual cues
- 94% Huddles
- 88% Across departments
- 91% To patient & family



Gap Analysis Results

- 94% Hourly Rounding
 - 42% can escalate to q15
 min
 - 76% validate rounding
- 88% Arms length in toilet for high risk

- Strategies utilized
 - 88% Keeping pts safe in bed
 - 97% Bed alarms
 - 79% sitters





Gap Analysis Results

- Post fall huddles
 - 58% at bedside with patient
 - 82% Response team or leader attends huddle

- Mobility Interventions
 - 67% Gait belts in every room
 - 94% Access to equip 24/7
 - 85% PT able to treat HR pts
 - 76% Nursing staff trained annually on safe mobility
 - 91% Nurses have a standard to evaluate mobility status



Gap Analysis Results

- Medication Risk
 - 70% Pharmacist review of HR pts meds
 - 33% Post fall review
 - 52% Ambien limited
 - 12% Post fall procedure for patients on anti-thrombotics

PFE

- 88% Bedside handoffs
- 79% Falls prevention included
- 61% Structured education



Let's Get Started!



- Moving beyond a score tailoring care
- Prevent and manage delirium
- Safe mobility
- Reducing medication risks
- Engaging patients and families



- Expanding the team
- Injury Risk
- Post fall care for antithrombotics
- Post fall huddles at bedside
- What else?



Topic #1: What's in a score?

15





ltem	Scale	Scoring
History of falling; immediate or within 3 months	No 0 Yes 25	
2. Secondary diagnosis	No 0 Yes 15	
Ambulatory aid Bed rest/nurse assist Crutches/cane/walker Furniture	0 15 30	
4. IV/Heparin Lock	No 0 Yes 20	
5. Gait/Transferring Normal/bedrest/immobile Weak Impaired	0 10 20	
Mental status Oriented to own ability Forgets limitations	0 15	

0-24 - Low Risk 25-44 – Medium Risk 45 + - High Risk

30

25





Risk Screening Facts

- We over rely on a risk score
- It is pointless to identify fall risk factors unless interventions to reduce and manage them are planned and implemented
- A risk screening is not an intervention
- Not all screening tools perform equally well in different settings
- Isn't everyone is at risk for fall when in the hospital?

GAP ALERT:

Do you determine a fall plan based upon a high, med or low risk score?



Universal Bundle

Addresses Accidental Falls

- Call light and possessions in reach
- Clear Pathway
- Address tethers remove asap
- Non-skid footwear
- Safe exit from bed, top side rails up
- Patient family education with teach back



GAP ALERT:

Do you monitor elements of your universal bundle?



Can we do better?

Identify your high risk or vulnerable populations that will receive a multifactorial assessment. For example:

- Admitted for a fall
- History of a fall
- Age based to capture elders
- Risk for injury

GAP ALERT:

Do you do anything special for a patient admitted for an injury from a fall?

Α	Age > 85
В	Bones – history of fracture, bone disease, osteoporosis
С	Coagulation – on blood thinners or bleeding disorder
S	Surgery within current episode of care

GAP ALERT:

Do you screen for injury risk?



From Screening to Assessing

Risk Factor	Assessment
Mobility or Gait Disturbance	 Get up and Go Test – to assess ambulation on admission and screen for rehab eval. BMAT: Banner Mobility Assessment Tool for Nurses – for nurse driven progressive mobility Rehab Evaluation
Mental Status	 <u>bCAM - Brief Confusion Assessment Method</u> – for all patients over 65 or your vulnerable population
Medications: analgesis hypnotics, antipsychot anticonvulsants, antidepressants, HTN cardiac meds, diuretic	 Guidance Sheet AHRQ Medication Fall Risk Screening Tool or
Postural Hypotension	 Assess orthostatic blood pressure to identify postural hypotension for elders, or your vulnerable population or patients on cardiac or HTN medications
	Provide in-depth assessment based upon individual risk factors or for

your "vulnerable" population.

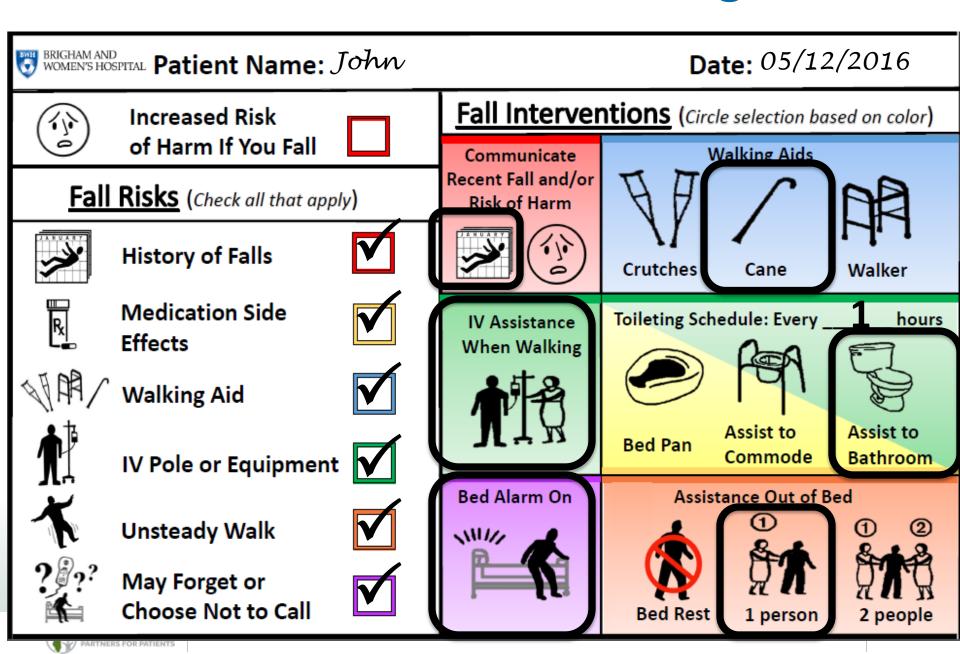
Sample Multifactorial Risk Assessment & Care Plan

Risk factor (Tick if applicable, then link with recommended actions) 4. Medication:	Recommended actions (Select appropriate interventions and record in care plan) a. Check medications have been reviewed with
Is the resident taking 4 or more medications? Is the resident taking any of the following? - Sedatives - Anti-depressants - Anti-Parkinson's - Diuretics (water tablets) - Anti-psychotics - Anti-coagulants - Anti-hypertensives	respect to falls risk (within the last 12 months is good practice). b. Report side-effects/symptoms of medication to GP. c. Read patient information leaflet which comes with the medication or speak to local pharmacist for information on medication side effects and interactions. d. Anticipate side-effects and take appropriate measures: - Sedatives: toilet and prepare for bed before giving night sedation. Monitor at all times, but especially overnight and supervise in the morning. - Anti-psychotics: can cause sedation, postural hypotension and impaired balance. Anticipate and compensate and report to GP. - Inform GP if the resident is excessively drowsy or mobility has deteriorated. - Diuretics: anticipate immediate and subsequent toileting. Ensure easy access to toilet and assist if required.
Has there been a recent change in medication that may effect falls risk (eg changes involving any of the above?)	 e. Write in progress notes and alert staff at handover. f. Report changes in alertness or mobility. g. Assess for postural hypotension before and one hour after morning medications, for 3 days. h. Anticipate side-effects and take appropriate measures.

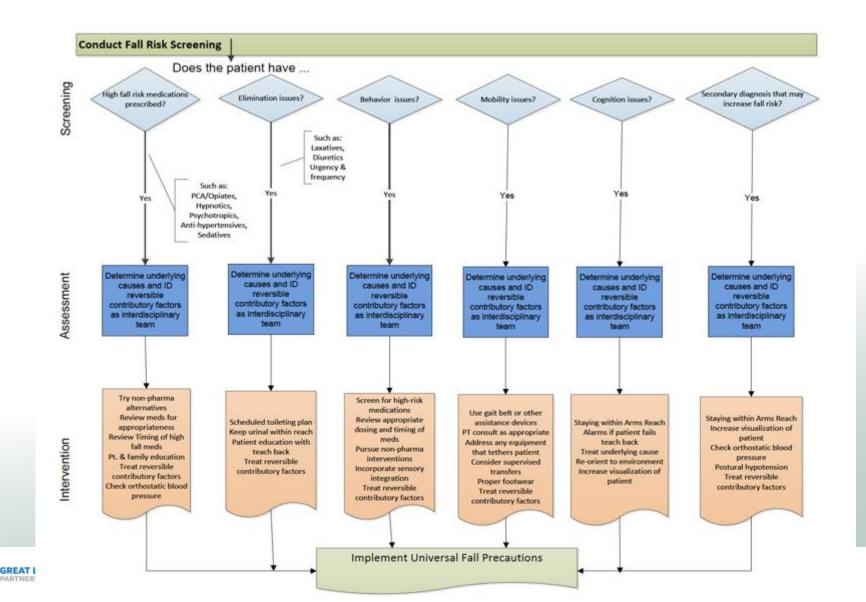
BEST PRACTICE ALERT:
Conduct a multifactorial
assessment on your vulnerable
population or patients admitted
for a fall

http://www.hrethiin.org/resources/displ ay/multifactorial-fallsrisk-assessment-andmanagement-tool

Fall TIPS Risk and Care Planning Tool



Risk based interventions



Injury prevention interventions

Fall Injury Reduction Protocol Modifiable Risk Features

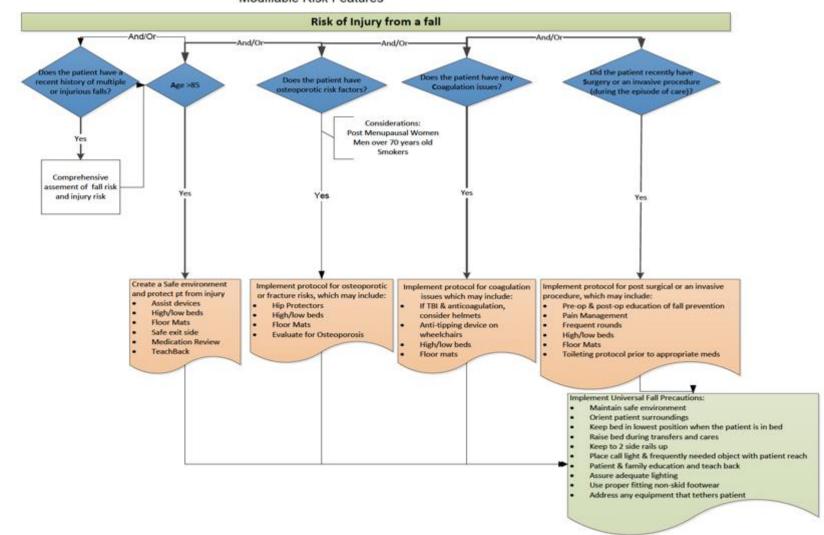




Table Top Discussion

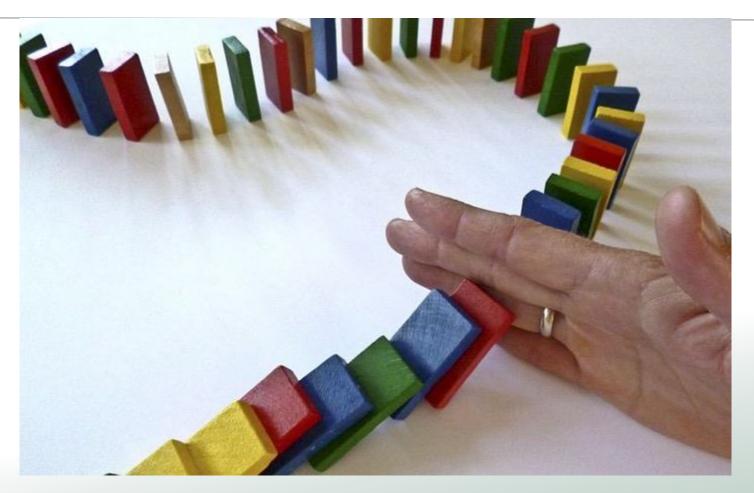
What's Happening at Your Hospital?

- Have you begun screening for injury risk?
 - When, where, how often?
 - What interventions are put in place?
- What are you doing to link risk factors to interventions upon admission?
 - What disciplines are activated?
 - How is plan communicated
- Report out





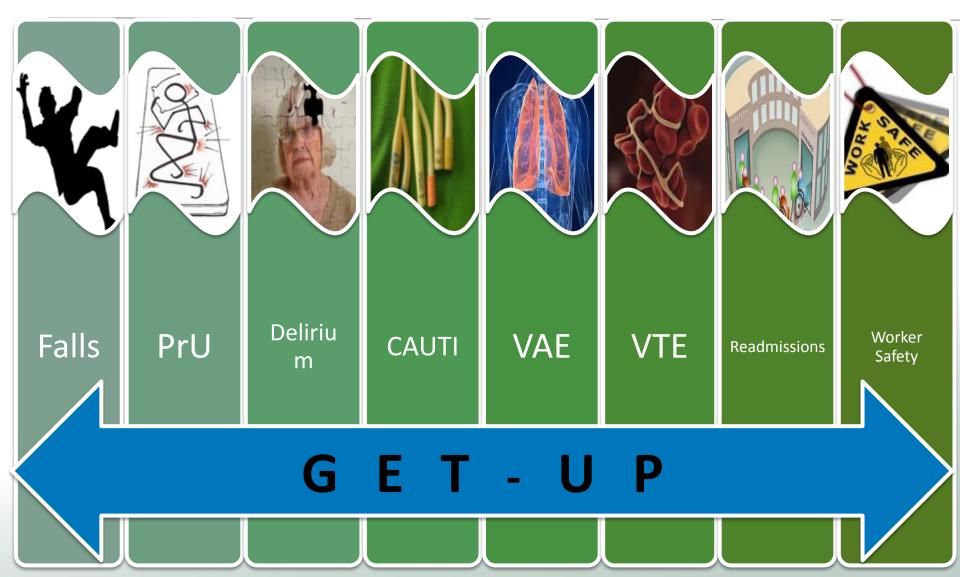
Hot Topic #2: Provide Safe Mobility



Stop the domino effect of forced immobility!



Early Progressive Mobility





Forced immobility is causing harm



- "New Walking Dependence" occurs in 16-59% in older hospitalized patients (Hirsh 1990, Lazarus 1991, Mahoney 1998)
- 65% of patients had a significant functional mobility decline by day 2 (Hirsh 1990)
- 27% still dependent in walking 3 months post discharge (Mahoney 1998)



Mobilization vs Bed Alarms

Benefits of Mobility Programs

- Prevents Delirium
- Preserves functional ability
- Reduces LOS
- Prevents Readmissions
- Prevents Fall Injuries,
 HAPU, CAUTI, VAE, VTE
- Reduces worker injuries
- Increases patient satisfaction

Hazard of Bed Alarms

- Alarm Fatigue
- Functional decline from forced immobility
- Patient dissatisfaction

GAP ALERT:

Are Bed Alarms in your Bundle and Applied Automatically?



Immobility, Delirium and Falls

- Immobility, illness and medications contribute to delirium
- 10-31% of fallers are delirious at the time of their fall
- A patient with delirium is 4.55 times more likely to fall (confidence interval: 1.47-14.05)
- Meta-analysis of delirium interventions and falls have shown the chance of falling decreases by 62% (odds ratio 0.38, CI: 0.25-0.6)

Pendlebury et. al. BMJ Open 2015, Nov 16, 5(11):e007808. Corsinovi et. al. Arch Gerontol Geriatr 2009, Jul-Aug 49(1):142-5. Hshieh et. al. JAMA Int Med 2015, Apr 175(4):512-20.



What happened to mobility?



"There is an inherent tension between preventing falls and promoting mobility" Growdon, Shorr, Inouye 2017



It's Simple

 If they came in walking, keep them walking





Use mobility to accelerate progress

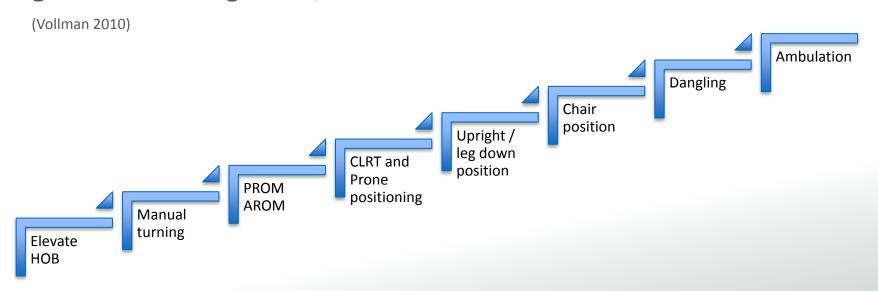


"When am I going to walk? I walked yesterday. It's better than just being in the chair. I feel better when I am walking."



What is progressive mobility?

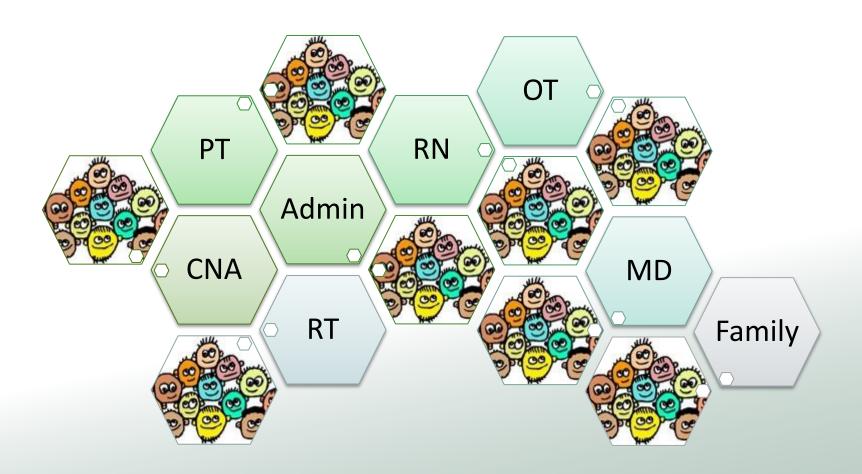
Progressive mobility is defined as a series of planned movements in a sequential matter beginning at a patient's current mobility status with goal of returning to his/her baseline



Vollman, KM. Introduction to Progressive Mobility. Crit Care Nurs. 2010;30(2):53-55.



Teaming Up to Mobilize





MUST DO's



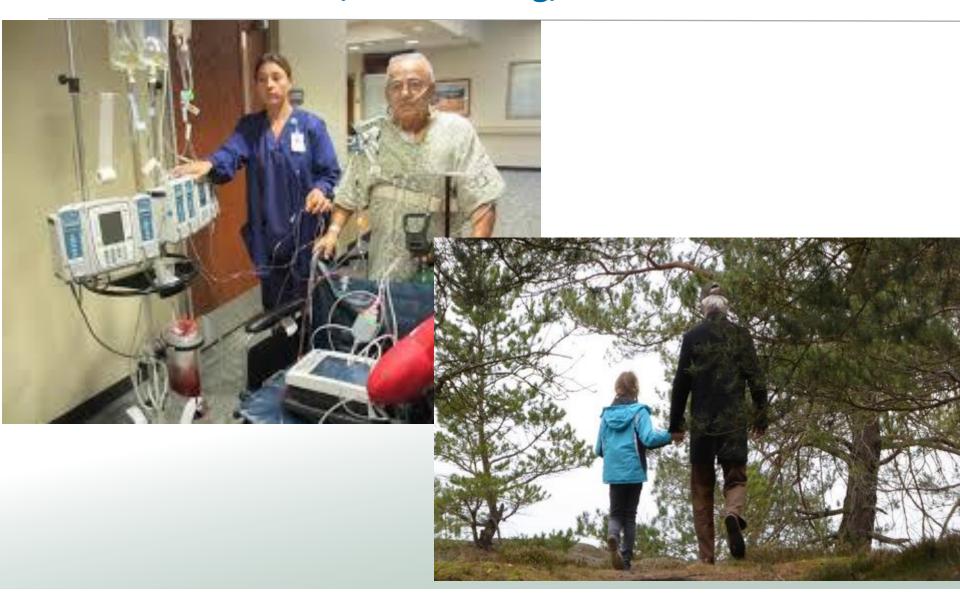


GET-UP MUST DO'S!

- 1. Walk in, walk during, walk out!
- 2. Grab and go mobility devices
- 3. Three laps a day keeps the nursing home away!

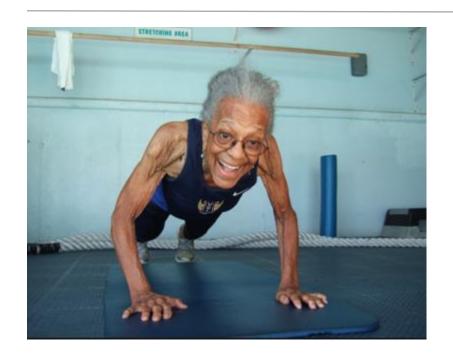


MUST DO #1 Walk In, Walk During, Walk Out!





MUST DO #1 Walk In, Walk During, Walk Out!

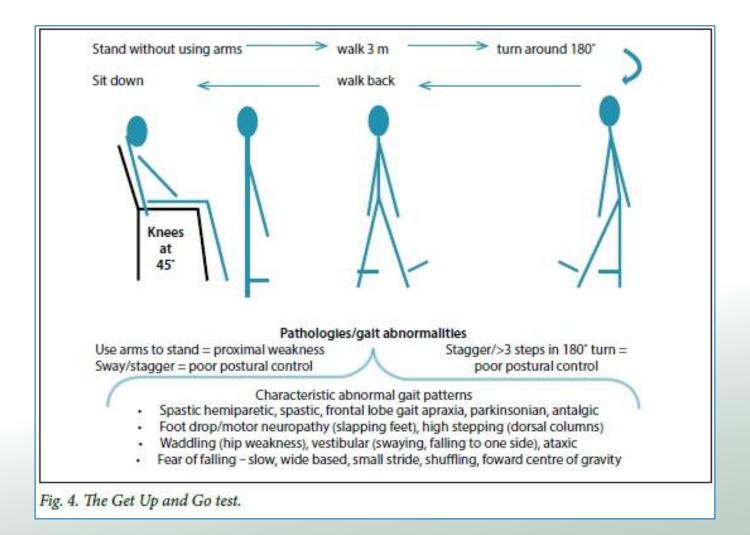




- Determine pre admission ambulation status
- Don't assume a frail appearance means weakness
- Use Get Up and Go test to assess ambulation skills



Get Up and Go Test





B.M.A.T. - Banner Mobility Assessment Tool for Nurses

Test	Task	Response	Fail = Choose Most Appropriate Equipment/Device(s)	Pass
Assessment Level 1 Assessment of: -Cognition -Trunk strength -Seated balance	Sit and Shake: From a semi-reclined position, ask patient to sit upright and rotate" to a seated position at the side of the bed; may use the bedrail. Note patient's ability to maintain bedside position. Ask patient to reach out and grab your hand and shake making sure patient reaches across his/her midline. Note: Consider your patients cognitive ability, including orientation and CAM assessment if applicable.	Sit: Patient is able to follow commands, has some trunk strength; caregivers may be able to try weight-bearing if patient is able to maintain seated balance greater than two minutes (without caregiver assistance). Shake: Patient has significant upper body strength, awareness of body in space, and grasp strength.	MOBILITY LEVEL 1 - Use total lift with sling and/or repositioning sheet and/or straps. - Use lateral transfer devices such as roll board, friction reducing (slide sheets/tube), or air assisted device. NOTE: if patient has 'strict bed rest' or billateral 'non-weight bearing' restrictions, do not proceed with the assessment; patient is MOBILITY LEVEL 1.	Passed Assessment Level 1 = Proceed with Assessment Level 2.
Assessment Level 2 Assessment of : -Lower extremity strength -Stability	Stretch and Point: With patient in seated position at the side of the bed, have patient place both feet on the floor (or stool) with knees no higher than hips. Ask patient to stretch one leg and straighten the knee, then bend the ankle/flex and point the toes. If appropriate, repeat with the other leg.	Patient exhibits lower extremity stability, strength and control. May test only one leg and proceed accordingly (e.g., stroke patient, patient with ankle in cast).	- Use total lift for patient unable to weight- bear on at least one leg. - Use sit-to-stand lift for patient who can weight-bear on at least one leg.	Passed Assessment Level 2 = Proceed with Assessment Level 3.
Assessment Level 3 Assessment of: -Lower extremity strength for standing	May test with weight-bearing on only one leg and proceed accordingly (e.g., stroke patient, patient with ankle in cast). Note: Consider your patients cognitive ability, including orientation and CAM assessment if applicable. If any assistive device (cane, walker, crutches) is needed, patient is Mobility Level 3. May test with weight-bearing on only one leg and proceed accordingly (e.g., stroke patient with ankle in cast). If any assistive device (cane, walker, crutches). NOTE: Patient passes Assessing the requires assistive device or cognitive assessment in safety awareness; patient is		- Use non-powered raising/stand aid; default to powered sit-to-stand lift if no stand aid available Use total lift with ambulation accessories, - Use assistive device (cane, walker,	Passed Assessment Level 3 AND no assistive device needed = Proceed with Assessment Level 4. Consult with Physical Therapist when needed and appropriate.
Assessment Level 4 Assessment of: -Standing balance -Gait	Walk: Ask patient to march in place at bedside. Then ask patient to advance step and return each foot. Patient should display stability while performing tasks. Assess for stability and safety awareness.	Patient exhibits steady gait and good balance while marching, and when stepping forwards and backwards. Patient can maneuver necessary turns for in-room mobility. Patient exhibits safety awareness.	MOBILITY LEVEL 3 If patient shows signs of unsteady gait or fails Assessment Level 4, refer back to MOBILITY LEVEL 3; patient is MOBILITY LEVEL 3.	MOBILITY LEVEL 4 MODIFIED INDEPENDENCE Passed = No assistance needed to ambulate; use your best clinical judgment to determine need for supervision during ambulation.

Always default to the safest lifting/transfer method (e.g., total lift) if there is any doubt in the patient's ability to perform the task.

Originated: 2011; revised: 2/27/12, 3/02/12, 3/07/12, 3/19/12, 4/19/12, 5/01/12, 5/03/12, 05/20/2013





Common Language

Reference Key for Therapy Lingo

Term Abbreviation		Definition	Effort Staff Provides	Effort Patient Provides	
Independent	I	Patient requires no assistance or supervision from person or device and is safe to ambulate and/or complete said task freely ad lib	0%	100%	
Modified Independent	Mod I	Patient completes task using device (e.g., walker, cane, grab bar, BSC, etc.) and/or requires extra time to complete task.	0%	100%	
Supervision Standby Assist	S SBA	No physical contact from single staff member to patient is required, however d/t fall risk, staff should be close to patient to maximize safety.	0%	100%	
Contact-Guard Assistance	CGA	Patient requires light physical contact from staff; but no actual assistance (e.g., hand placed lightly on back to steady patient without actual support).	<5%	>95%	
Minimal Assistance	Min A	Patient requires 25% or less assistance or support to safely complete task/transfer/ambulation.	25%	75%	
Moderate Assistance	Mod A	Patient requires 50% assistance from staff member to safely complete task or transfer/ambulation.	50%	50%	
Maximal Assistance	Max A	Patient requires 75% assistance or support from staff member to safely complete task or transfer/ambulation.	75%	25%	
Dependent Total Assistance	D Total A	Patient requires 100% assistance or support from staff member to complete task or transfer/ambulation.	100%	0%	

NOTES:

- ✓ Green-shaded boxes indicate assistance options that do not involve physical touch from staff member.
- ✓ Multiple person transfers would be signified by "x2+" (e.g., max A x3).
- ✓ ALL patients designated as high fall risk (aka, yellow gown) MUST use gait belt at all times when out of bed. This includes "quick" BSC transfers, standing to pull up pants, etc.



Mobility begins on admission

Tier Level	Defining Characteristics	Interventiona
Tier 1: Nonambulatory	Patients who • require more than a one-person assist for ambulation/transfers • are unable to maintain weight on their lower extremities • require any form of lift equipment	Active range-of-motion exercises:
Tier 2: Ambulatory	Patients who	Ambulate with or without assistance in the hallway as tolerated Get out of bed and into a chair for all meals

^a To be performed three times a day (in accordance with a patient's ability).

Wood W, et al.(2014) A Mobility Program for an Inpatient Acute Care Medical Unit. http://www.nursingcenter.com/pdfjournal?AID=2591440&an=00000446-201410000-00023&Journal ID=54030&Issue ID=2591321



MUST DO #2 Grab and Go Mobility Devices!

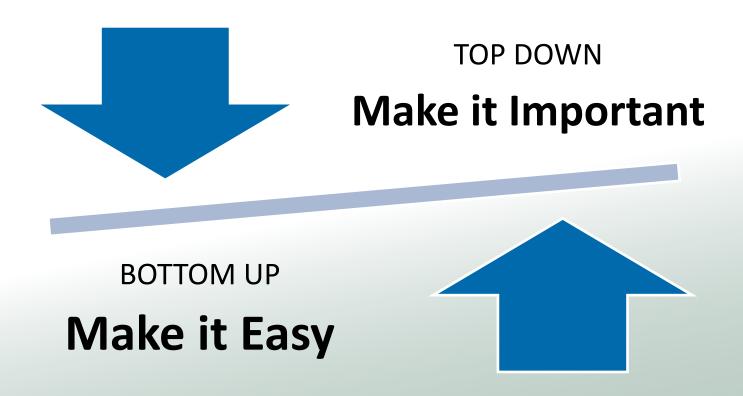
- Gait Belts in every room*
- Patients and staff have access to mobility devices
- Safe mobilization and patient handling training for staff

Gait belts are used to help control the patient's center of balance.



^{*}with the exception of rooms for behavioral health patients

Integrating Safe Patient Handling





Safe Patient Handling & Mobility Training

Safe Patient Handling

- Use of equipment lifts, lateral devices
- Assisting bed activities
- Lifting limits not > 35 lbs
- Use SPH coaches when lifts used
- How to avoid friction / shear

Mobility Training

- Assessing ambulation skills
- Use of gait belts
- Control of a fall
- Assisting with ambulation
- Screening for correct fit of mobility aid
- Special populations:
 - Hip precautions
 - Hemiplegia
 - Parkinson's



MUST DO #3 3 Laps a Day, Keeps the Nursing Home Away!





Facing the Facts about Mobility

Mobility interventions are regularly missed

- Nursing perceptions
 - Lack of time
 - Ease of omission
 - Belief it is PTs responsibility
- Survey results
 - Concern for patients level of weakness, pain and fatigue
 - Presence of devices IVs and Urinary Catheters
 - Lack of staff to assist

Doherty-King, B Bowers, B. How nurses decide to ambulate hospitalized older adults: development of a conceptual model. Gerontologist. 2011 Dec:51(6): 786-97



Tips for Promoting Mobility

- Re-purpose the Falls Team to become a Safe Mobility Team
- Engage a MD champion
- Think PT Stewardship
- Start Small
 - Target a small population
 - By age, diagnosis, service line



Make it visible

- Get the Docs involved!
- Engage patients and families

Bedside Sign





5A Walk of Fame Board



Tips for Promoting Mobility

- Order Modifications
- Delete orders for
 - Bedrest
 - Ad lib
- Replace with specific orders
 - Times, activities, distance
- Build documentation fields
 - All activity documented in one location



Tips for Promoting Mobility

- Delegation of patient mobility
 - Replace sitters with a mobility aide
 - Train sitters to ambulate patients
 - Create mobility tech role reallocate transporters, safe patient handling coaches
- Rehab and Nursing face-to-face bedside handoffs or safety huddles
 - Document plans and progress on white boards
 - Collect data



Progressive mobility can reduce patient harm, employee injuries and LOS

Case Study: St Francis, Michigan City, IN

- 3 mobility trained nursing assistants
 - 70% reduction in HAPI
 - 40% reduction in worker back injuries
 - 45% reduction in RN turnover
 - 43% reduction in readmission
 - 39% reduction in d/c to SNF

Case Study: John Hopkins MICU

- ICU rehab program
 - 10% reduction in mortality
 - 30% (2.1 day) reduction in MICU LOS
 - 18% (3.1 day) reduction in hospital LOS

Tips for General Wards

- What works in Surgery?
- Everyone up for meals "Heels for Meals"
- Promote ambulation in hallways "earn a four and you're out the door"
- Provide activities, mental stimulation cross word puzzles, card games
- Work with families as partners in mobility.
 Bring adequate shoes to the hospital.



Tips for the ICU

- Start with micro-turns to prevent gravitational disequilibrium
- Use a safe mobility screening tool or protocol
- Use beach chair positioning
- Engage rehab, respiratory, physicians



Beach Chair Position



Share your Strides towards Mobility

What does your program look like?

- Mobility expectations
- Who assess mobility status?
- Who mobilizes?
- How is it documented?
- How is progress measured?





Hot Topic # 3 - Delirium and Falls

- Delirium is the leading contributor to hospital falls
- 10-31% of fallers are delirious at the time of their fall
- A patient with delirium is 4.55 times more likely to fall (confidence interval: 1.47-14.05)
- Meta-analysis of delirium interventions and falls have shown the chance of falling decreases by 62% (odds ratio 0.38, CI: 0.25-0.6)



Pendlebury et. al. BMJ Open 2015, Nov 16, 5(11):e007808. Corsinovi et. al. Arch Gerontol Geriatr 2009, Jul-Aug 49(1):142-5. Hshieh et. al. JAMA Int Med 2015, Apr 175(4):512-20.



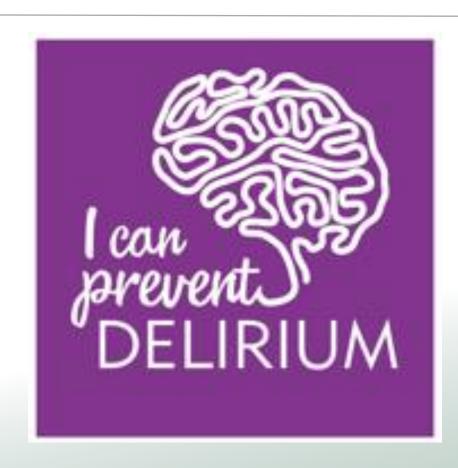
Prevent, Detect, Manage Delirium

- Meta-analysis of 14 studies showed a 62% reduction in falls when multicomponent nonpharmacological delirium interventions were in place.
- Most interventions were centered around:
 - Early mobilization (OOB for meals and ambulation);
 - Vision and hearing interventions;
 - Orientation protocol (such as white boards);
 - Therapeutic activities (mentally stimulating ≠ entertainment!);
 - Sleep enhancement protocol (in place when delirium order sets are activated).



Prevent, Detect, Manage Delirium

- Assess for delirium
 - B-Cam or CAM
- Discontinue tethers
 - urinary catheters, IVs
- Mobilize at highest level
 - 3 x per day or more
- Minimize CNS affecting meds and anticholinergics





Sample delirium prevention activities

- Lights on
- Shades up
- Aids in glasses, hearing aid
- Walk three times a day
- Stimulating activities
- AM:
 - Teeth brushed
 - Face washed
 - Up for breakfast
- Evening
 - Teeth brushed
 - Face Washed





Medications, delirium & falls

- Medications have both therapeutic effects and side-effects, which are sometimes harmful
- Medications which affect blood pressure and/or have CNS effects can be associated with increased fall risk (fall risk increasing drugs – FRIDs)
- Medications with strong anti-cholinergic effects can lead to delirium





Hot Topic # 4 – Meds – why not?

Non- Modifiable Risk Factors

- advanced age
- previous falls



Modifiable Risk Factors

- medications
- muscle weakness
- gait and balance issues
- postural hypotension
- chronic conditions
 - Incontinence
 - Cognitive Issues

GAP ALERT:

Do you review medications on high risk or vulnerable populations?



The Big 3



Medications that affect the brain

- Benzodiazepines, sleep aids (the "z" drugs), antipsychotics, anticonvulsants, antidepressants, opioids, anticholinergics
- 3 + CNS medications to be avoided associated with increased falls
- Medications that affect blood pressure
 - Anti-hypertensives, alpha-blockers
 - BP of less than 110 is associated with fall risk
- Medications that lower blood glucose

Fall Risk Increasing Drugs

Anticholinergics	Antipsychotics Antidepressants	Anticonvulsants	Sleep Aids	Benzodiazepines	Opiates	Cardiac drugs, Diuretics w/ Hypotension
Delirium	Hypotension, sedation, slow reflexes, loss of balance	Ataxia Unsteadiness	Drowsiness, Impairs balance, Slow reactions	Drowsiness, Impairs balance, Slow reactions	Sedation, slow reactions, impairs balance, delirium	Orthostatic hypotension, Hypotension, bradycardia
Examples: Atropine® Actifed® Benadryl® Cogentin® Compazine® Dramamine® Ditropan® Detrol® Flexeril®	Examples: Elavil® Effexor® Haldol® Geodon® Symbalta® Trazadone®	Examples: Dilantin® Phenobarbital® Tegretol®	Examples: Ambien® Luminal® Dalmane® Nembutal®	Examples: Ativan® Valium® Xanax® Librium® Klonopin®	Examples: Codeine Morphine Fentanyl Duragesic® Oxycontin®	Examples: Aprinex® Altase® Captopril® Catapress® Chlorthalidone Tenormin® Inderal XL® Lopressor® Mavik®
Norpramin® Phenergan® Stelazine® Tofranil® Vistaril®		all med	t is not exhaudication trade and bands at the source	names. e found		Nitroglycerine Monopril® Isorbide® Vasotec® Zestril®

Adapted from: British Geriatric Society Medication Guidance Sheet



Drugs Increasing Fracture Risk

Tricyclic Antidepressants	Serotonin Reuptake Inhibitors	First Generation Antipsychotics	Benzodiazepines
Depression is	Depression is associated	Bone loss – drug induced	Sedative effects,
associated with	with falling, bone mineral	hyperprolactinemia	impairs cognition,
falling, bone mineral	loss, fractures		psychomotor
loss, fractures			alterations
Examples:	Examples:	Examples:	Example:
Elavil®	Paxil [®]	Haldol®	Valium [®]
Sinequan®	Zoloft®	Chlorpromazine	
Tofranil [®]	Prozac [®]	Fluphenazine	
Pamelor®	Celexa [®]		
Norpramin®	Lexapro [®]		
	Cymbalta®		
	Fetzim [®]		
	Efffexor XR®		
	This list is not exhaustive		
	names. Generic names ca		

Did you know 3 or more doses of diazepam can increase risk of hip fracture by 50% in the elderly?

- Risk increases to 60% increase after 2 weeks
- Risk increases to 80% after 1 month



Sample Medication Review Tools

British Geriatrics Society Medication and Falls Guidance Sheet

DRUGS ACTING ON THE BRAIN (PSYCHOTROPIC DRUGS)

There is good evidence that stopping these drugs can reduce falls (1).

Taking such a medicine roughly doubles the risk of falling. There is no data on the effect of taking two or more such tablets at the same time (2).

Sedatives, antipsychotics and sedating antidepressants cause drowsiness and slow reaction times. Some antidepressants and antipsychotics also cause orthostatic hypotension.

MEDICATION GROUP	COMMONLY USED MEDICATIONS WITHIN THE GROUP	EFFECTS ON FALLS RISK
Sedatives: Benzodiazepines	Temazepam, Nitrazepam Diazepam, Lortemazepam Chlordiazepoxide, Flurazepam, Lorazepam, Oxazepam, Clonazepam	Drowsiness, slow reactions, impaired balance. Caution in patients who have been taking them long term.
Sedatives: "Zs"	Zopiclone, Zolpidem	Drowsiness, slow reactions, impaired balance.
Sedating antidepressants (tricyclics and related drugs)	Amitriptyline, Dosulepin Imipramine, Dosepin Clomipramine, Lofepramine, Nortriptyline, Trimipramine Mirtazapine, Mianserin Trazodone	All have some alpha blocking activity and can cause orthostatic hypotension. All are antihistamines and cause drowsiness, impaired balance and slow reaction times. Double the rate of falling.
Monoamine oxidase inhibitors (MAOIs)	Phenelzine, Isocarboxazid, Tranylcypromine	MAOIs are little now used; all (except moclobemide) cause severe orthostatic hypotension.
Drugs for psychosis and agitation	Chlorpromazine, Haloperidol, Fluphenazine, Risperidone Quetiapine, Olanzapine	All have some alpha receptor blocking activity and can cause orthostatic hypotension. Sedation, slow reflexes, loss of balance.

AHRQ Medication Fall Risk Score – Screening tool

Medication Fall Risk Score

Point Value (Risk Level)	American Hospital Formulary Service Class	Comments
3 (High)	Analgesics,* antipsychotics, anticonvulsants, benzodiazepines†	Sedation, dizziness, postural disturbances, altra and balance, impaired cognition
2 (Medium)	Antihypertensives, cardiac drugs, antiarrhythmics, antidepressants	Induced orthostasis, impaired cerebral perfusi health status
1 (Low)	Diuretics	Increased ambulation, induced orthostasis
Score ≥ 6		Higher risk for fall; evaluate patient

^{*} Includes opiates.

AHRQ Medication Fall Risk Score

KEY:

High risk Medium risk Possible cause NICE guidelines

British Geriatric Society Medication Guidance



[†] Although not included in the original scoring system, the falls toolkit team recommends that you include nonbenzodiazepine sedative-hypnotic drugs (e.g., zolpidem) in this category.

Ideas



- Pharmacist and physician or nurse review one patient's medications per week to build awareness.
- Flag FRIDS or your targeted meds in the medication record, indicating how they can contribute to falls. "may cause orthostatic hypotension" or "may contribute to delirium



Run a pharmacy report on FRIDS on a targeted drug class – benzos, antidepressants, antipsychotics,



Thinking Small

- How can we target a small patient population or a drug type for targeted interventions?
 - Patients or residents
 - At risk for injury
 - Pts 65 or greater with > 5 medication
 - Pts 85 or older
 - Those who have fallen
 - Drug class
 - Benzo's and sleep aids?
 - Antidepressants or Antipsychotics?



Table Talk & Bright Spots

- What strategies are you using to optimize medications and prevent delirium?
- How are you segmenting the population?
 - By patient type?
 - By medication?
- What can nurse, physicians and pharmacists do to work together to minimize FRIDs?
- Do you have delirium interventions in place that you can share?



Hot Topic # 5 The Patient and Family



Untapped Resource



Anatomy of a Fall in the Hospital

1. Patient choice

- a. Use the call light and wait
- b. Use the call bell, wait, wait, wait get up and go
- c. Don't use the call light and get up and go
- 2. Medications on board
- 3. Unfamiliar environment
- 4. Mobilization, toileting need
- 5. Hard surfaces





More than "Call Don't Fall"



6E ULCA RRH: Bone Marrow Transplant Patient

http://www.hret-hiin.org/resources/display/ucla-critical-thinking-fall-prevention-case-studies



Why is it so tricky?





Understanding Human & Organizational Science

- Each patient brings unique capabilities and limitations
- The key factor associated with falls is movement
 - Movement is important for the patient
 - Movement is restricted by the organization





The Human Side

Patients may be

- overwhelmed, distracted, unreceptive due to illness
- misunderstand and deny risk for fall
- unable to wait for assistance

Patients must mobilize to go to the toilet



Patients want

- independence
- privacy
- freedom of movement



The Organization Side

Prevent injury through risk mitigation

- Limit independence
- Limit mobilization







A Peek at the Evidence

- Patients understand that fall prevention is important, but 50-88% believe it does not apply to them. <u>Twibell et al 2015</u>, <u>Sonnad et al 2014</u>)
- When structured falls education is provided to cognitively intact patients, falls can be reduced significantly.

- 20 minute formal fall education with medical oncology patients led to ZERO falls with patients receiving education while those not educated continued to fall at a rate of 18% (Li-Chi Huang, 2015)
- 45 minute formal fall education with rehab patients resulted in a 45% reduction in falls in cognitively intact patients (Haines, 2011)



Changing Your Conversation with Patients

- Do you label Patients / Caregivers: Non-Compliant?
- What does Non-Compliant Mean to You?
- How do you measure your effectiveness?
- How do you evaluate effectiveness of your teaching?

The patient is non-compliant!
The patient won't listen!





Fall Education Components

- Educate about fall risks
 - Medications
 - Tripping hazards
 - Orthostatic hypotension, especially in morning
 - Footwear
 - Rolling equipment and furniture
- Educate on safe ambulation
 - Level of assistance needed
 - Promote progressive ambulation
 - Include ambulation in bedside handoffs



"Teach Back"

 "Teach Back" Testing: what are the trends in patients' difficulty to understand what is taught?

Ask the patient to describe or repeat <u>back</u> in his or her own words what has just been told or taught. Return demonstration is a similar technique used by diabetic educators, physical therapists, and others.

Never ask whether patients understand; they always say "yes".



Teach Back Language

"I want to be sure I explained everything clearly. Can you please explain it back to me so I can be sure I did?"

Teach Back Question Card #1

"We covered a lot today about preventing falls, and I want to make sure that I explained things clearly. So let's review what we discussed.

What are three strategies that will

Teach Back Question Card #3

"I want to make sure I explained this clearly. When you get back home in a few days, what will you tell your [friend or family member] about [key point just discussed]?"

Teach Back Question Card #2

"I want to be sure that I did a good job of teaching you today about risk for falls.

Could you please tell me in your own words what you are doing to prevent falls? How you will prevent falls in the future?

Teach Back Question Card #4



Post Fall Huddles at the Bedside

Good Example of Post-Fall Huddle



	tubing, equipment, or furniture; Possibly could have Equipment malfunction been prevented		
Bad Example of Post-Fall Huddle	□ Known Patient-Related (Intrinsic) Risk Factors Examples: Confusion /Agitation, Lower extremity weakness, Impaired gait, Poor balance/postural control, Postural hypotension, Centrally acting medication		
	Unknown, Unpredictable Sudden Unanticipated Condition Physiological Exemples: Heart Attack, Seizure, Drop attack Unpreventable		
	Unsure – Please describe fall cause and your assessment of preventability, :		
	4. If preventable, determine error type and describe actions take	n to decrease risk of reoccurrence at the system level.	
****	ERROR TYPE	ACTIONS TAKEN TO DECREASE RISK OF REOCURRENCE AT THE SYSTEM LEVEL	
CAPTURE FALLS TOOLKIT	☐ Task An individual did NOT ensure planned interventions were in place as intended (e.g. bed alarm not activated)		
 Training videos and power point 	☐ Audgement An individual made a decision about an uncertain process (e.g. patient at high risk for falls left alone while toileting in the aboence of a policy not to do so)		
• Forms	Care Coordination Communication among multiple staff members was		
Pocket Card	incomplete, inconsistent, or minunderstood (e.g. fall risk status not communicated to all parties)		
• https://www.unmc.edu/patient- safety/capturefalls/tool-inventory.html	System Communication and multiple elements (tasks, knowledge, equipment) combine to make the system unnellable (e.g. unreliable process for monitoring orthostatic BP across the system)		
GREAT LAKES	Thank you for contributing to patient	safety and quality of care.	
PARTNERS FOR PATIENTS			

Post-Fall Huddle Documentation

Directions: Items 1 - 3 should be completed by the huddle facilitator. Item 4 should be completed by the fall risk reduction

3. Please identify the proximal cause(s) of the fall by checking ALL appropriate boxes below and describe actions

FALL TYPE

PREVENTABILITY

Accidental

COTA.

□ Pharmacist

Pharmacy Tech

Physical Therapist

ACTIONS TAKEN TO PREVENT REOCCURENCE FOR

THIS PATIENT

□ Physical Therapy Assistant

☐ Quality Improvement Coordinator

Time of Huddle

2. Who was included in the huddle? CHECK ALL THAT APPLY

taken to prevent a reoccurrence for this patient...

FALL CAUSE

Examples: Liquid on floor; Trip over

☐ Environmental (Extrinsic) Risk Factors

□ CNA

□ Primary Nurse

□ Occupational Therapist

□ Patient

Other:

☐ Family/Caregiver

☐ Charge Nurse

Bedside Signage

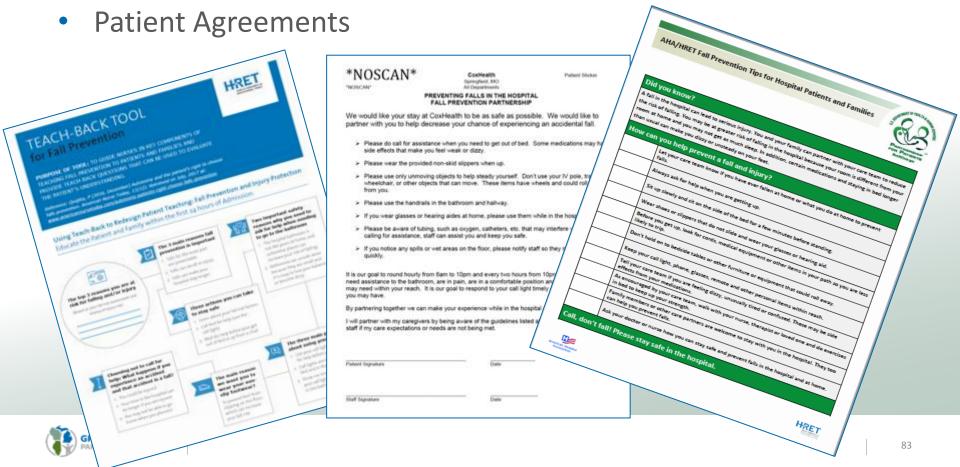
Get UpGet MovingGet Better!			
Day:			
GOAL: 3 Walks			
Goal: Up to Chair 3x			

White Board			
I'm at risk for a fall because			
I could be injured if I fall because			
Activity orders:			
How much assistance	Assistive Device		

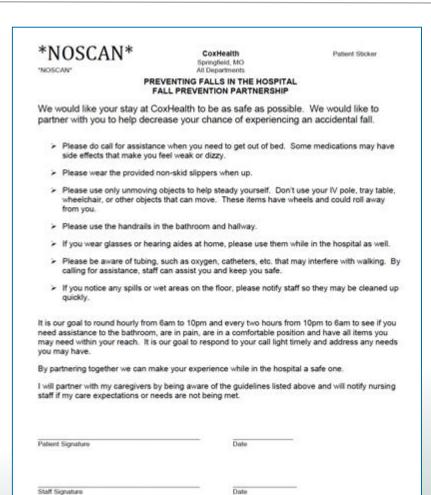


Patient and Family Engagement Tools

- Falls Teach Back Tool
- Anticoagulation Teach Back Tool
- Fall Prevention Tips for Patients and Families



Patient Partnership Agreement



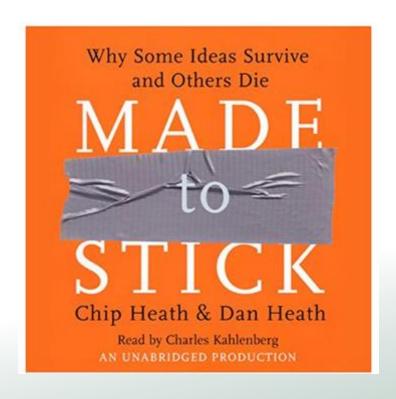


Cox Patient Agreement



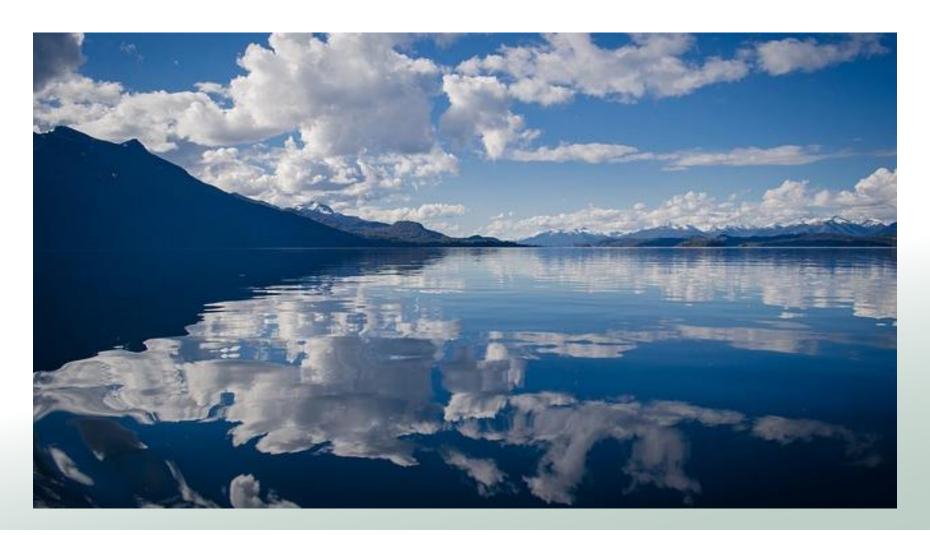
Share your bright spots!

- Describe how you overcame staff discomfort in including the patient in the post fall huddle?
- What have you learned as a result of having a patient rep on the falls team?
- Any other PFE Bright Spots?





Reactions / Questions





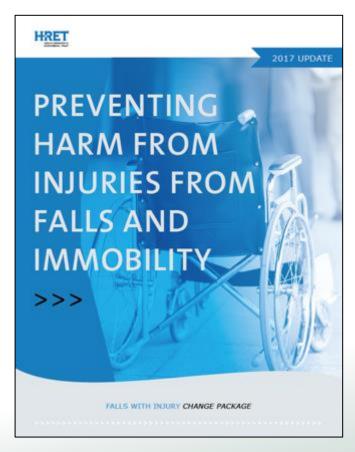


jconrad@cynosurehealth.org





2017 Falls with Injury Change Package



Falls with Injury Change Package



Falls Top Ten Checklist



Resources

Days Since Last Fall Sign

Risk and Care Planning tools

- NICE Multifactorial Fall Risk Assessment and Management Tool
- Fall TIPS© Risk Screening and care plan tool
 - Article
 - <u>Fall TIPS Webinar: How to Implement on your unit</u>

Injury Risk Assessment

- Safe From Falls Roadmap Anticogualtion
- ABCS Injury Risk Assessment

Injury Mitigation

 Floor Mat Resource and Implementation Guide

Mobility Assessments

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

Mobility Resources

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

Delirium Assessment Resources

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



Resources

Medication Review Resource

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

Patient and Family Engagement Resources

- Anticoagulation Teach Back Tool
- Teach Back Tool for Fall Prevention
- <u>Teach Back Event Recording</u>
- <u>Fall Tips for Patient and Families Handout</u>
- Patient Agreements:
 - Intermountain Health Patietn 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: <u>Critical Thinking Video Series</u>

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



Break 10 MINUTES



Agenda

- Introductions
- Preventing Harm from Falls and Immobility
 - Jackie Conrad, RN, MBA; Cynosure Health
- Break
- Improvement Workshop
 - Developing an Aim Statement
 - Driver Diagrams as a Plan for Change
- Final Thoughts















- Aim
 - Verb: Point or direct at a target; have the intention of achieving.
 - Noun: A purpose or intention, a desired outcome.

Having an aim is crucial to your success!

"A system is a network of interdependent components working together toward a common aim. Every system must have an aim. Without an aim that is clear to all, there is no system."

-W. Edwards Deming, Out of the Crisis





Explicit Aim

 Open, clear, unambiguous, precise, plain

Implicit Aim

 Understood, implied, unspoken, embedded, hidden



- Essential components of an aim statement:
 - Population
 - Goal
 - Time Expectation
 - Where
 - Guidance
- Outcome measure

We will reduce our total monthly med surg falls with injury from the FY 2007 average of 6 per month to 3 per month by the end of FY2018 under the guidance of our unit managers with accountability to our CNO, Linda Lee.



- Essential components of an aim statement:
 - Population
 - Goal
 - Time Expectation
 - Where
 - Guidance
- Process Measure

We will increase our initiation of a post fall huddle at the bedside with the patient within one hour of the fall from the FY 2017 Q4 average of 30% to 60% on med surg units by FY Q4 2018, under the guidance of our unit managers and our CNO, Linda Lee.



- Essential components of an aim statement:
 - Population
 - Goal
 - Time Expectation
 - Where
 - Guidance

We will reduce our total monthly **adult med surg** falls with injury from the FY 2007 average of 6 per month to 3 per month by the end of FY2018 under the guidance of our unit managers with accountability to our CNO, Linda Lee.



- Essential components of an aim statement:
 - Population
 - Goal
 - Time Expectation
 - Where
 - Guidance

We will reduce our total monthly med surg falls with injury from the FY 2007 average of 6 per month to 3 per month by the end of FY2018 under the guidance of our unit managers with accountability to our CNO, Linda Lee.



- Essential components of an aim statement:
 - Population
 - Goal
 - Time Expectation
 - Where
 - Guidance

We will reduce our total monthly med surg falls with injury from the FY 2007 average of 6 per month to 3 per month by the Q4 of FY2018 under the guidance of our unit managers with accountability to our CNO, Linda Lee.



- Essential components of an aim statement:
 - Population
 - Goal
 - Time Expectation
 - Where
 - Guidance

We will reduce our total monthly **med surg** falls with injury from the FY 2007 average of 6 per month to 3 per month by the end of FY2018 under the guidance of our unit managers with accountability to our CNO, Linda Lee.



- Essential components of an aim statement:
 - Population
 - Goal
 - Time Expectation
 - Where
 - Guidance

We will reduce our total monthly med surg falls with injury from the FY 2007 average of 6 per month to 3 per month by the end of FY2018 under the guidance of our unit managers with accountability to our CNO, Linda Lee.



- Essential components of an aim statement:
 - Population
 - Goal
 - Time Expectation
 - Where
 - Guidance

We will reduce our total monthly adult med surg falls with injury from the FY 2007 average of 6 per month to 3 per month by the end of FY2018 under the guidance of our unit managers with accountability to our CNO, Linda Lee.



- Essential components of an aim statement:
 - Population
 - Goal
 - Time Expectation
 - Where
 - Guidance



We will reduce our total monthly **adult med surg** falls with injury from the FY 2007 average of **6 per month to 3 per month** by the end of FY2018 under the **guidance of our unit managers with accountability to our CNO, Linda Lee.**



Develop your aim statement!

USE YOUR GAP ANALYSIS AS A JUMPING-OFF POINT.







- "Change"?
 - First order change = do more, do less; more of the same ideas/changes that have already been implemented
 - Second order change = create a new way to do things completely; "modify the flowchart"



- Five methods to develop change ideas:
 - Logical thinking about current system
 - Benchmarking and learning from others
 - Creative thinking
 - Using change concepts
 - Using technology



Investigate Your Problem and Implement Best Practices

Driver diagrams: A driver diagram visually demonstrates the causal relationship between your change ideas, secondary drivers, primary drivers and your overall aim. A description of each of these components is outlined in the table below. This change package is organized by reviewing the components of the driver diagram to first, help you and your care team identify potential change ideas to implement at your facility and second, to show how this quality improvement tool can be used by your team to tackle new process problems.

Aim	Primary Driver	Secondary Driver	Change Idea
		Secondary Driver	Change Idea
	Primary Driver	Secondary Driver	Change Idea

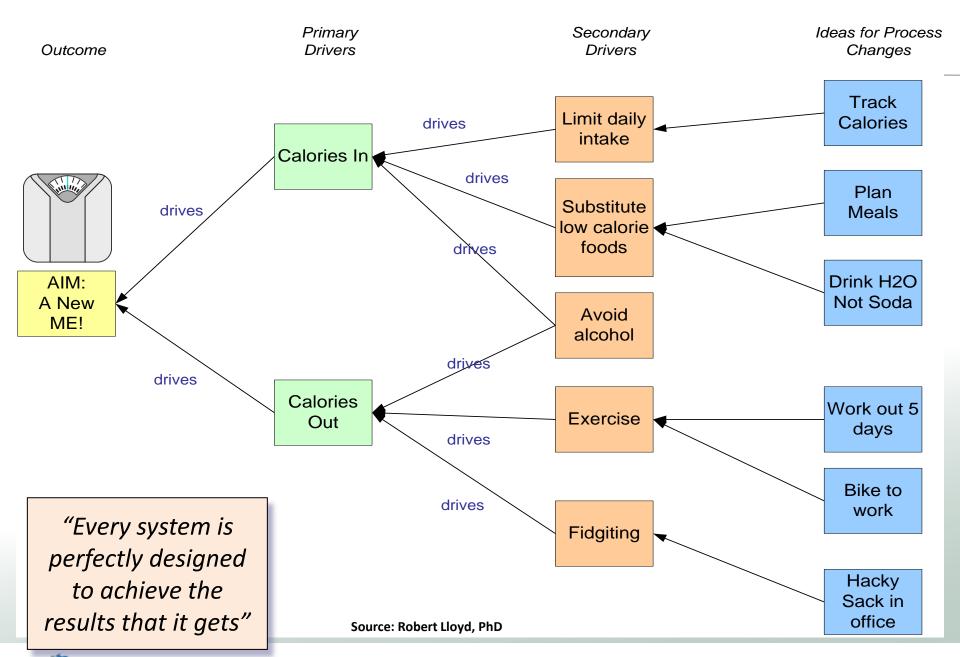
AIM: A clearly articulated goal or objective describing the desired outcome. It should be specific, measurable and time-bound.

PRIMARY DRIVER: System components or factors that contribute directly to achieving the aim.

SECONDARY DRIVER: Action, interventions or lower-level components necessary to achieve the primary driver.

CHANGE IDEAS: Specific change ideas which will support/achieve the secondary driver.





-	•	<u> </u>	i
AIM	PRIMARY DRIVERS	SECONDARY DRIVERS	CHANGE IDEAS
Reduce Injuries from Falls by 20% by end of FY 2018	Address Modifiable Risk Factors	Implement a screening tool that triggers assessment, interdisciplinary input to address risks	
		Avoid hypnotics/sedatives, anticholinergics	
		Screen for Injury Risk	
	Implement a safe mobility plan	Assess mobility upon admission	
		Staff access to mobility equip 24/7	
		Maintain a safe environment and path to toilet	
		Mobilize patient at their highest level three times a day from day 1	
		Communicate mobility plan to the team and the patient	
		Document and track mobility activities	
	Engage the patient and family	Provide structed fall education using teach back	
		Conduct bedside handoffs with the patient and	
		address mobility	
		Conduct post fall huddles at the bedside with the patient	
	Protect the patient from injury	Provide optimal post fall care – special care for blood	
		thinners	
		Provide appropriate level of supervision in toilet room	
		for high injury risk patients	
		Implement floor mats for high injury risk patients	

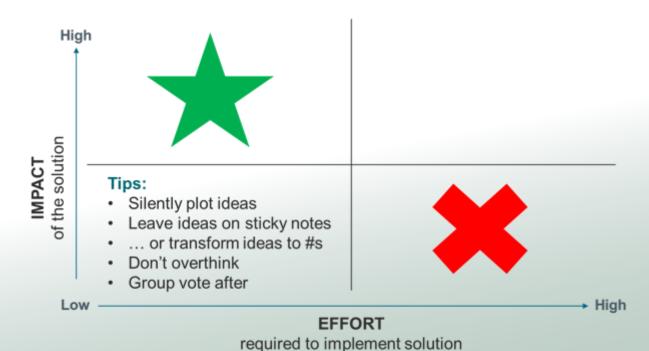


AIM	PRIMARY DRIVERS	SECONDARY DRIVERS	CHANGE IDEAS
	1	1a	
		1b	
	2	2a	
Your Aim Statement		2b	
Here!	3	3a	
		3b	
		3c	
	4	4a	



Selecting Change Ideas

Idea	Can be accomplished in 90 days?	There's will to fix this problem?	Is within our control?	Is a sponsor for this work?
Idea 1	2	4	3	4
Idea 2	5	4	4	5
Idea X	4	2	1	3





Develop your driver diagram!

USE YOUR AIM STATEMENT AS A JUMPING-OFF POINT.



Once you have your diagram...

GO TALK TO ANOTHER GROUP AND PROVIDE FEEDBACK.



Agenda

- Introductions
- Preventing Harm from Falls and Immobility
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Wrap-Up

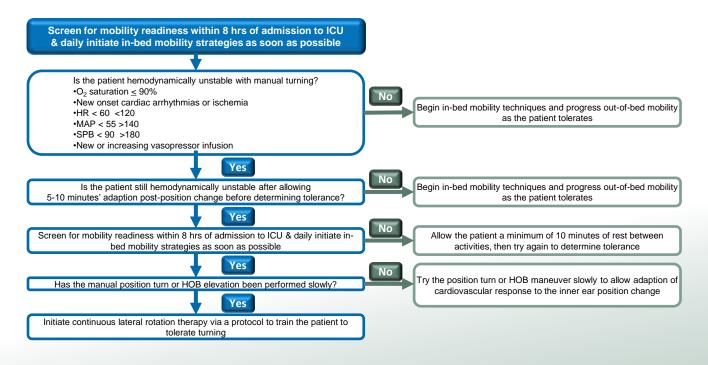
- Upcoming calls
 - Wednesday, June 6 from 10-11a
 - Wednesday, June 20 from 10-11a
- Finish your gap analysis if you have not already done so to begin identifying your roadmap for change
- Continue to build your knowledge and the need for change – use your driver diagram!
- Please reach out to us for anything!
 - Adam Kohlrus (P: 217-541-1181; <u>akohlrus@team-iha.org</u>)
 - Brigette DeMarzo (P: 630-276-5525; bdemarzo@team-iha.org)
 - Kelly McMahon (P: 630-276-5585; kmcmahon@team-iha.org)



Thank you!

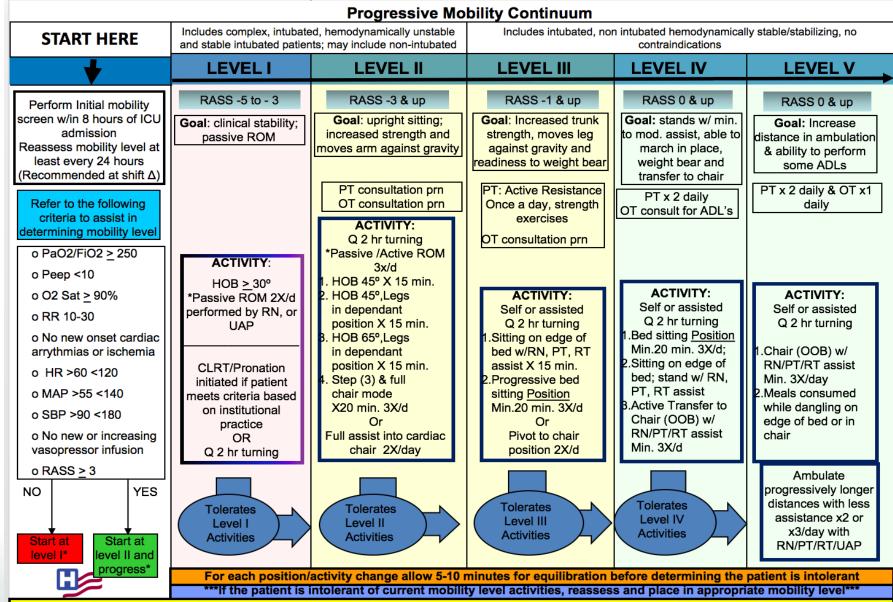


Decision-Making Tree for Patients Who Are Hemodynamically Unstable With Movement



Vollman KM. *Crit Care Nurse*. 2012;32:70-75. Vollman KM. *Crit Care Nurs* Q. 2013;36:17-27.





*Mobility is the responsibility of the RN, with the assistance from the RT's Unlicensed Assistive Personnel and PT/ OT. PT and OT may assist the team with placement to the appropriate mobility level of activity, always prioritizing patient and provider safety. Placement is based on clinical judgment.