

# **CAPTURE Falls**

Collaboration and Proactive Teamwork Used to Reduce

## **Fall Risk Reduction Best Practices for Nursing Staff in the Acute Care Setting**

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# Learning Objectives

- Review baseline data from 2011 hospital survey specific to fall risk reduction
- Discuss best practices in fall risk reduction and fall prevention interventions
- Describe methods to evaluate fall risk reduction structures and processes
- Review main points and questions from attendees



## **Introduction to Best Practices in Fall Risk Reduction**

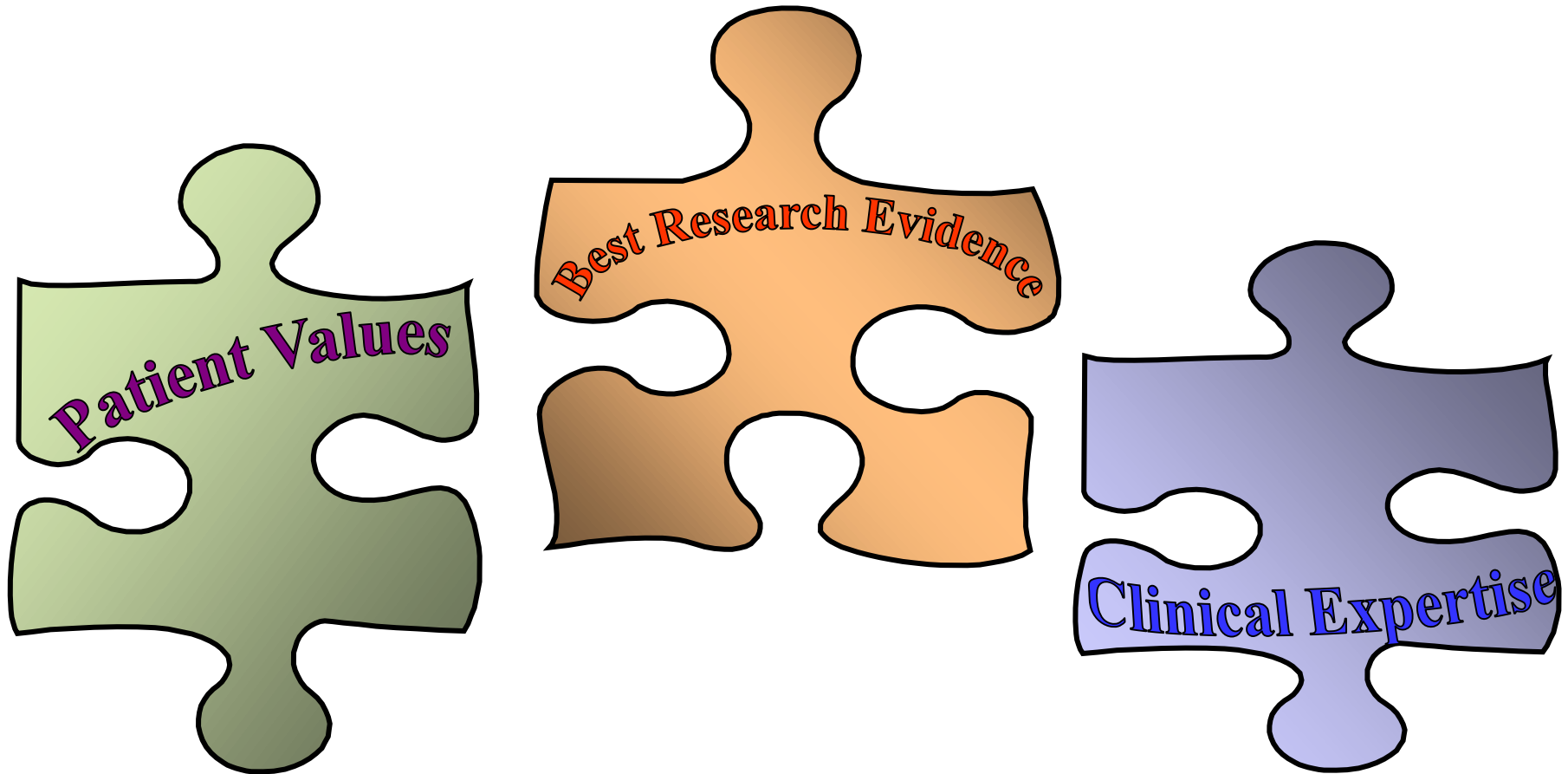


# Fall Risk Reduction

- Fall risk has been reduced in studies where interprofessional team members were actively engaged in fall risk reduction efforts. (*Gowdy and Godfrey, 2003; Szumlas et al, 2004; von Renteln-Kruse and Krause, 2007*)
- An interprofessional team (vs. nursing only strategy) and use of benchmarks are associated with sustained improvement (*Sulla and McMyler, 2007; Krauss et al, 2008; Murphy et al, 2008*)



# Evidence Based Practice...What is it?



“The integration of best research evidence with clinical expertise and patient values”

-Sackett et al., 2000, p.1

# Donabedian's Framework to Assess Quality

- Quality is inferred by measuring elements of care
  - Structure—conditions under which care is provided (human resources, equipment, environment)
  - Process—what was done (diagnosis, treatment, rehabilitation, prevention, patient education)
  - Outcome—changes in individuals and populations that are due to health care



*(Donabedian, 1980)*



# 2011 Falls Survey in NE Hospitals

- Examined structures-processes-outcomes related to fall risk reduction.
- 70 of 83 general community hospitals in NE responded (84%)
  - 47 of 65 CAHs (72%)
  - 13 of 18 non-CAHs (72%)

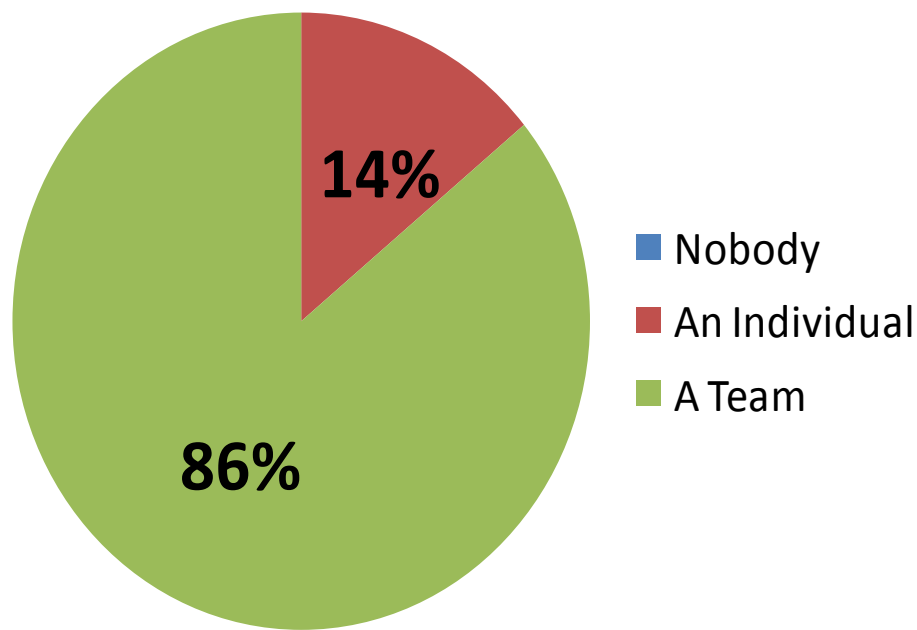




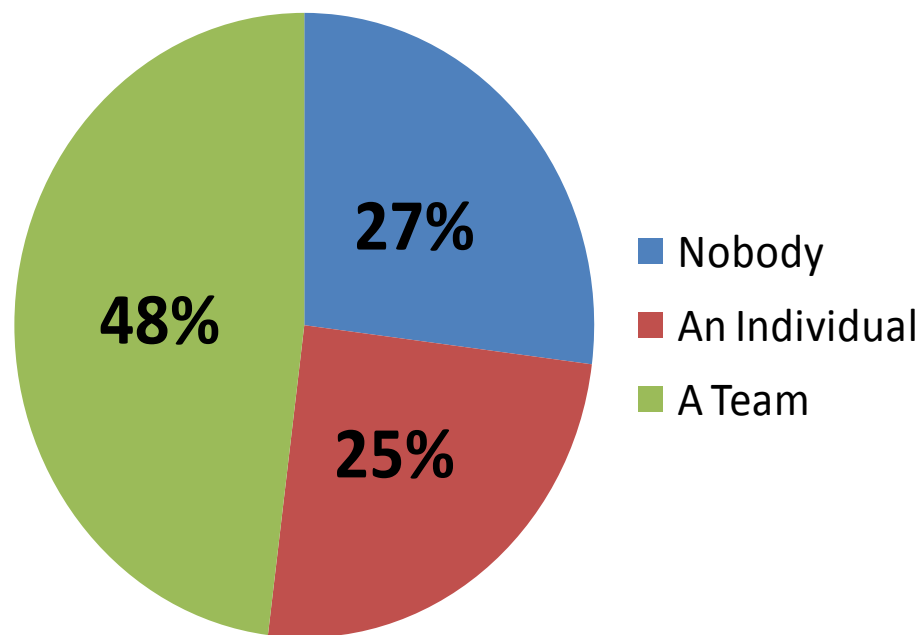
# Fall Risk Reduction Strategies: Structures

## Who is Accountable for Implementing Your Fall Risk Reduction Program?

**Non-CAHs (46 – 689 Beds,  
n=14)**



**CAHs (12 - 25 Beds, n=56)**





# Fall Risk Reduction Strategies: Processes

What do we do with our patients who are at risk?

## Universal Interventions

- Used for all patients identified at risk

## Targeted Interventions

- Used for specific subsets of patients identified at risk

*Institute For Clinical Systems Improvement, 2010; Hughes (Ed.), 2008.*



# Fall Risk Reduction Strategies: Processes

Universal Interventions	No one	Individual	Team
Call Light within Reach	100%	100%	97%
Document Fall Risk in Chart	93%	94%	92%
Nonskid Footwear	73%	69%	82%
Top Bed Rails Up	87%	44%	74%
Hourly Rounding	53%	75%	72%
Supervised Ambulation	73%	56%	56%
Supervised Toileting	73%	56%	46%
Gait/Transfer Belt	60%	56%	67%
Supervised Transfers	80%	50%	51%
Patient/Family Education	53%	69%	69%



# Fall Risk Reduction Strategies: Processes

<b>Universal Interventions</b>	<b>No one</b>	<b>Individual</b>	<b>Team</b>
Declutter Environment	60%	56%	72%
Colored Wrist Band	47%	81%	59%
Alert Sign	40%	69%	56%
Low Bed	40%	44%	54%
Assistive Device for Transfers/Gait	47%	31%	39%
Bed/Chair Alarm	40%	44%	33%
Increased Lighting	27%	38%	28%



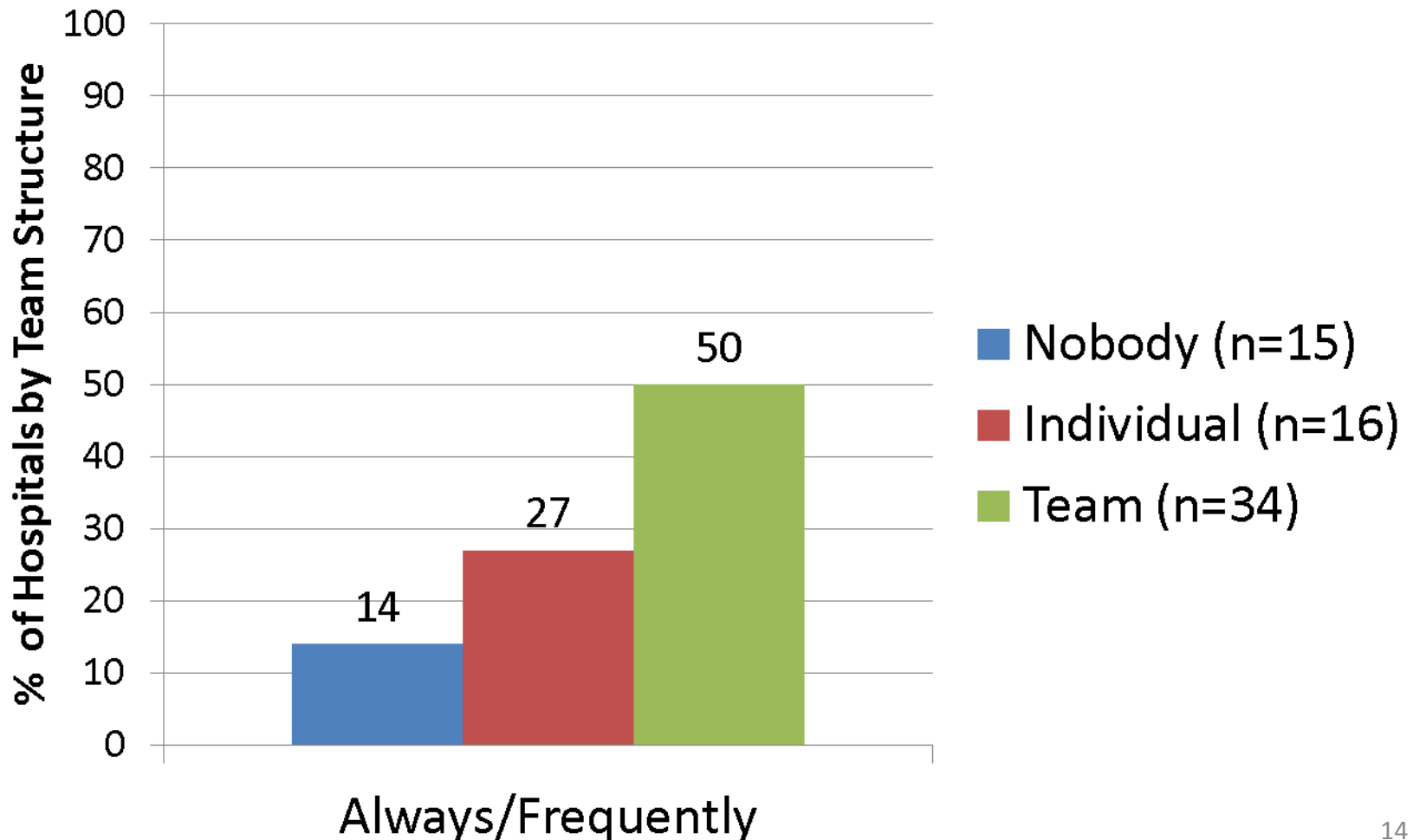
# Fall Risk Reduction Strategies: Processes

Targeted Interventions	No body	Individual	Team
Elevated Toilet Seat	67%	75%	72%
Physical Therapy Evaluation	60%	56%	67%
Sitter	53%	63%	62%
Toileting Schedule	47%	63%	62%
Medication Review	47%	50%	59%
Occupational Therapy Evaluation	33%	31%	54%
Hip Protectors	7%	13%	18%
Handoff Tool to Communicate Risk	7%	25%	36%



# Role of Teamwork

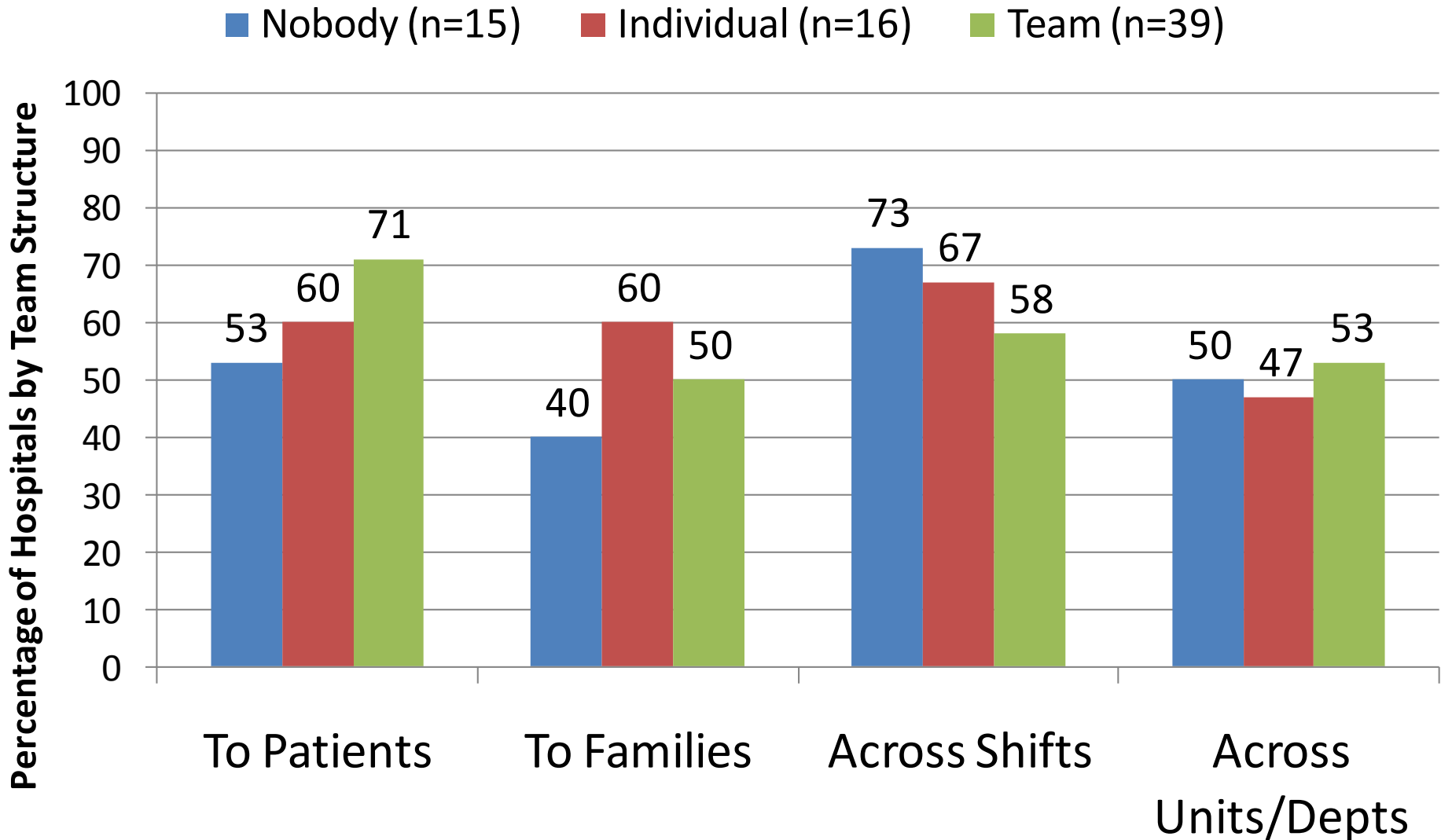
Do patient care staff from multiple disciplines discuss patients' fall risk in the context of daily care?





# Role of Communication

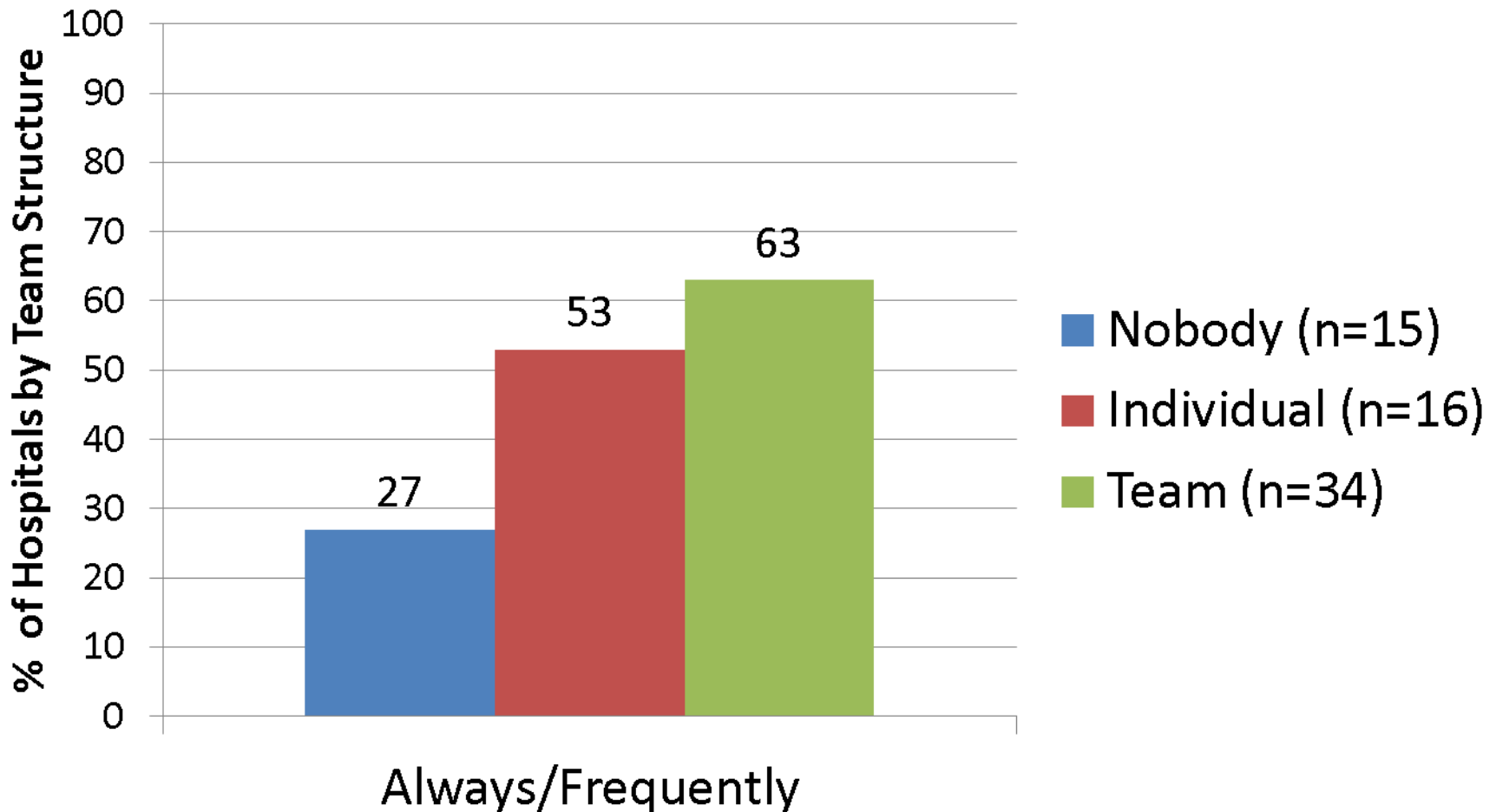
Do you communicate fall risk status.....?





# Role of Teamwork

Do staff receive information about actions taken to improve care as a result of falls?







# Fall Risk Reduction Policies and Procedures

- ALL hospital staff (clinical and non-clinical) need to know the hospital's policies and procedures for fall prevention
- ***Education needs to be ongoing*** and include:
  - Fall prevention interventions (universal and targeted)
  - Post-fall protocols – what to do after a patient falls
  - Environmental indicators that can pose hazards



# Summary

- Team structure – not hospital size – significantly predicts rate of injurious falls/1000 patient days (adjusted by observation hours)
- Structures & processes of evidence-based fall risk reduction
  - Interprofessional team
  - Consistent use of valid risk assessment tool
  - Consistent implementation of universal and targeted interventions
  - COMMUNICATION to all team members (pt./family)
  - Learn from data, benchmark, and modify p/p based on data and evidence



# **Best Practices for Fall Risk Reduction in the Hospitalized Patient**



Universal interventions  
for *all patients*



# Universal Interventions: Environment

- Communicate hospital-related factors that may potentially cause a fall
- Familiarize patient to environment
- Have patient “teach Back” call light use
- Reduce hazards
  - Keep room clutter-free and floor clean and dry
  - Call light and personal possessions within reach
  - Handrails in bathroom, room and hallway
  - Non-slip, well-fitting footwear
  - Night light or supplemental lighting in room



# Universal Interventions: Environment

- Assess need for 1:1 monitoring, arrange prn
- Minimize or avoid the use of restraints
- Keep bed in lowest position with wheels locked when patient is lying in bed
- Top side rails up at all times
- Hourly rounding ***with intention***



# Universal Interventions: Mobility

- Transfer (gait) belts should be available at the bedside
- Use proper technique to transfer patient
- Monitor gait, balance and fatigue level with mobility
- Instruct patients to rise slowly
- Promote mobility- "*The Bed is Not Your Friend*"-ambulate in hallway and up for all meals if not on physician ordered bedrest.



Targeted interventions  
for *patients at risk for falling*





# Targeted Interventions

- What are the ***unique*** characteristics of ***this patient*** that place him/her ***at risk*** for falling?
- What ***interventions*** need to be in place ***particular*** to ***this patient's fall risk factors*** (***in addition*** to the ***Universal Interventions*** already in place)?

- Visual communication
  - Signage on door/in room, colored armband/non-skid socks
- Verbal communication
  - With patients/families
    - Teach back method!
  - Among staff – DOCUMENT in chart
  - Across units/departments
  - Across facilities



## Patient/Family Education

- Patient's fall risk at admission, when risk status changes, and at discharge
  - Hospital's fall prevention program
    - What the signage, armband, socks mean
    - What their role is in keeping the patient safe
      - Follow staff instructions
      - How to contact staff when necessary
- Document evidence of patient education, and patient/family understanding of risk and prevention measures (**teach back**)



# Targeted Interventions: Environmental

- Identify pharmacological factors that contribute to patient's fall risk
  - Pharmacy consult for medication review
- Identify cognitive or physical deficits that contribute to patient's fall risk
  - Calm agitated patient with unhurried, soothing voice tone, music, familiar face
  - Maintain consistency in procedures, routines, staff allocation



# Targeted Interventions: Environmental

- Identify possible triggers for agitated, impulsive behavior
  - Medications, time of day, infection, loud noise
    - Minimize when possible
- Provide dependent patients with an adapted means of summoning help (place bright colors on call light to make it easier to see)
- Consider a PT or OT consult for behavioral management
  - Maximize orientation, awareness and function
  - Determine whether mobility aids are needed and used appropriately and correctly



# Targeted Interventions: Bed and Toileting

- Use bed and chair alarms at all times
- Supervised transfers and ambulation
- Toilet patient on regular schedule
- Toilet patient before administering sedating medications
- Use raised toilet seat as needed
- Staff member should remain with patient when in bathroom



# Targeted Interventions: Mobility

- Use personal sensory and assistive devices
  - hearing aids, glasses, walker, cane
- Consider a PT or OT consult for mobility safety
- Use wheelchair of proper height
  - Wheelchair leg rests off floor and out of the way
- Lock wheels of wheelchair or rolling chairs
- Use lifts for patients who meet lift criteria



# Targeted Interventions: Mobility

- Use hip protectors for patients at high risk for hip fx
- Use of helmets to prevent head injury
- Bilateral safety MATS on either side of a regular bed for those 85 years of age and older.





# Clinical Judgment in Fall Prevention

- Despite a patient's fall risk assessment score, staff may believe patient would benefit from fall prevention interventions.
- Follow your clinical instinct!
- Individualize the patient's care according to the patient's needs.



# Best Practices for Evaluating Fall Risk Reduction Efforts



# Post Fall Huddle

## Post Fall Huddle

- after patient is assessed and stabilized, a huddle is performed in patient room and initiated by the charge nurse or designee for team to discuss factors that may have contributed to the fall



# Post Fall Huddle

- A Post Fall Huddle is one suggested best practice for reducing falls. Post fall huddles provide a mechanism to learn from falls by immediately assessing the situation and reviewing the event with the people involved, including the patient and family members, as well as determining what can be done at the bedside to prevent another fall from occurring.



# Post Fall Huddle Talking Points

- Were there task errors?*(e.g. planned interventions were not in place as intended)*
- Were there judgment errors?*(e.g. strategy used to assist with transfers/gait was inappropriate)*
- Were there care coordination errors?*(e.g. fall risk status not communicated to all parties)*
- Need to consult with Physical Therapy about balance/transfers/mobility?
- Need to consult with Pharmacy about medications?



Collecting data on a regular basis to evaluate the extent to which staff are complying with the structures and processes that should be in place to reduce the patient's risk for falling.



# Auditing Fall Reduction Structures and Processes

	Observation # Room			Observation # Room		
Reviewer: _____	Date: _____ Time: _____ Fall Risk Score = _____			Date: _____ Time: _____ Fall Risk Score = _____		
	Yes	No	N/A	Yes	No	N/A
Falls History Assessment done on Admission profile.						
At risk for falls documented in chart.						
Remains free from injury on Care Plan.						
Falls Prevention Education given to patient and/or family.						
<b>FALL PREVENTION ACTIONS (Tailored to Hospital Policies)</b>	Yes	No	N/A	Yes	No	N/A
Falls Risk sign posted near door.						
Yellow armband in place.						
Is patient aware of own fall risk?						
Is sitter or family companion aware of patient's fall risk?						
Is call light within reach?						
Does bed alarm work?						
Is a bed alarm in use?						
Is a chair alarm in use?						
Is the environment free of clutter?						
Is RN documenting "Falls Precautions" in patient chart?						
Is RN documenting Bed and/or Chair alarm use in patient chart?						



# Unit A Risk Assessment and Prevention Audit Data

Unit A	Falls History Assessment done on Admission profile			At Risk for Falls on Problem List			Remains free from Injury on Care Plan			Falls Prevention Education sheet in plan of care in chart			Patient Education form Indicates Falls Education given to patient and/or family			Falls Risk sign posted near the door.			Yellow armband in place.			Is patient aware of own fall risk?			Is sitter or family companion aware of patient's fall risk?			Is call light within reach?			Does bed alarm work?			Is bed alarm in use?			Is a chair alarm in use?			Is the environment free of clutter?			Is RN documenting Falls Precautions on Flowsheet II under Adult Cares?			Is RN documenting Bed and/or chair alarm use on Flowsheet II under Adult Cares?		
	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A						
November totals	11	1	0	10	2	0	12	0	0	9	3	0	0	3	9	8	4	0	7	4	0	10	2	0	4	0	8	12	0	0	3	0	9	0	0	12	2	0	10	11	0	1	12	0	0	2	0	10
November compliance %	92%	17%	0%	83%	17%	0%	100%	0%	0%	75%	25%	0%	0%	25%	75%	67%	33%	0%	64%	36%	0%	83%	17%	0%	33%	0%	67%	100%	0%	0%	25%	0%	75%	100%	17%	0%	83%	92%	0%	8%	100%	0%	0%	17%	0%	83%		





# What are your fall rates?

“Transparency of fall rates by sharing between hospital units, hospitals and hospital systems or public reporting has a positive effect on falls and injury reduction” (ICSI, 2012, p.6)



# Definition of Fall

- A fall is any unplanned descent to the floor with or without injury (NDNQI, 2012).
- Injury levels can range from minor (bruising) to major (fracture, death).



# Calculating Fall Rates

- Fall rate/1,000 patient days =

$$\frac{\text{\# falls}}{\text{patient days}} \times 1,000$$

- Injury fall rate/1,000 patient days =

$$\frac{\text{\# injury falls}}{\text{patient days}} \times 1,000$$



# Calculating Patient Days

## Method One:

- Midnight Census Method: A count of all patients on the unit at one time each day
  - Record the # of patients on the unit each day at midnight
  - At the end of the month, sum the daily midnight census counts

From September 1-10, there were 4 patients on Unit A at midnight each day. From September 11-30 there were 5 patients on the unit at midnight each day.  $10 \text{ days} \times 4 \text{ patients} = 40 \text{ patient days} + 20 \text{ days} \times 5 \text{ patients} = 100 \text{ patient days}$ . Patient days for September = 140 for Unit A.

Unit A total fall rate for September:

$$\frac{\text{Unit A total falls for September}}{\text{Unit A patient days for September}} \times 1000$$



$$\frac{\text{2 falls}}{140} \times 1000 = 14.3$$

- Repeat process using Injury Fall count to calculate Injury Fall rate by unit.
- Combine data for all units in hospital to calculate hospital total fall rate and injury fall rate.



# Calculating Patient Days

## Method Two:

- Actual hours method: The actual number of hours a patient spends on the unit based on arrival and departure times within a calendar month
  - Sum the hours that all patients spend on each unit each month
  - Divide the total number of hours by 24 to obtain each unit's patient days



# Calculating Patient Days: Actual Hours Method

Patient A was admitted on September 1 at 0830 and was discharged on September 7 at 1600 (6 days x 24 hours + 7.5 hours) = 151.5 hours. Patient B was admitted on September 2 at 2000 and discharged on September 31 at 1000 (28 days x 24 hours + 14 hours) = 686 hours. 8 additional patients were on the unit in September, for a total of 2340 hours. The total actual hours for September =  $151.5 + 686 + 2340 = 3177.50$ . The patient days for the month of September would be  $3177.5 / 24 = 132.39$

**Unit A total falls for September**

**Unit A patient days for September                      x 1000**





# Calculating Patient Days: Actual Hours Method

$$\frac{\text{2 falls}}{132} \times 1000 = 15.1$$

- Repeat process using Injury Fall count to calculate Injury Fall rate by unit.
- Combine data for all units in hospital to calculate hospital total fall rate and injury fall rate.



# Summary

- Communication!
- Education
  - Patient/Family
  - All Staff – ongoing
- Universal interventions
- Targeted interventions
- Measurement and evaluation
  - Use your data to make meaningful decisions about your fall reduction program



**Questions?**



# Contact Information

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Web site where tools are posted

[www.unmc.edu/rural/patient-safety](http://www.unmc.edu/rural/patient-safety)



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<https://www.surveymk.com/s/S7KKXBM>

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