



Fall Prevention

A Challenge and Opportunity


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Famous Fallers



Not So Famous Faller!





A Sobering Problem-Washington State Facts

- ❖ More people >65 admitted for care after a fall than all ages admitted for care after MVA
- ❖ In 2007 >19,000 people hospitalized for non-fatal falls
- ❖ In 2007, Falls Resulted in 709 deaths
- ❖ The Age Adjusted Fall Death Rate has more than Doubled, from 26 to 60 per 100,000



A Sobering Problem

Among Washington Fallers- Nearly 2/3rd are Discharged to nursing facilities.

About 50% will not Return to Independent Living

Up to 30% of all hospital based falls result in serious injury.



Liability

A stroke rehabilitation patient fell off a commode after reaching for the toilet paper, despite being instructed to wait for help. She ended up in a cast for a month and developed foot drop.

\$178,750 judgment against hospital.

Your organization must demonstrate a fall prevention program that is organized and current.



Cracking the Code AKA-Why Is This So Hard?

Aging patient population

Rising Patient Acuity/Dynamic changes in condition

Nurse Shortages

Inefficient work environment for healthcare workersproximity counts!



IHI Improvement Map

- ◆ IHI.org/map
- ◆ Fall Prevention has moderate costs to implement
- ◆ Time to implement-1-2 years



IHI Improvement Map

- ◆ Difficulty to implement
 - Most Challenging-Involves multiple units or disciplines AND requires a substantial shift in culture.

Level of Evidence-Some evidence-Studies
Published with some controls included



IHI Improvement Map

Elements

Assessment-On admission and with change in Clinical condition.

Identify-Patients most at risk for moderate to severe injury

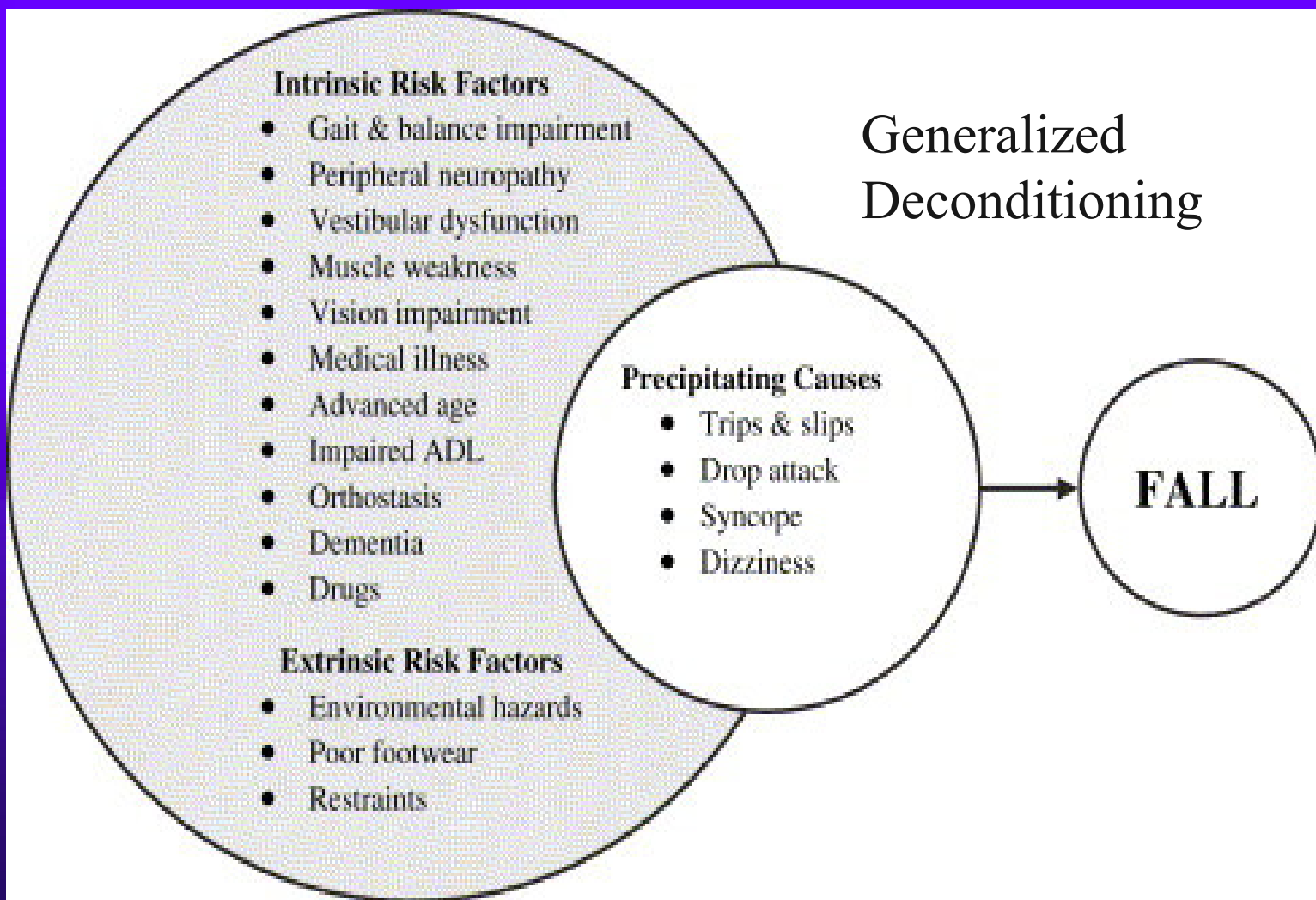


Etiology-A Perfect Storm

Falls result from an interaction between risk factors in the individual and factors in the environment.



It's Multifactorial





Other Fall Risk Factors in the Individual

- ✦ Previous history or fear of falling
- ✦ Altered elimination
- ✦ Confusion, impulsivity, poor judgment
- ✦ Sensory or visual impairments
- ✦ Depression
- ✦ Benzodiazepines, Antiepileptics, Opioids
Epidural Medication

Relative Risk- 16 multivariate studies

Factor	Mean RR	Range	
Weakness	4.4	1.5-10.3	
Prior fall	3.0	1.7-7.0	
Balance Deficit	2.9	1.6-5.4	
Gait Deficit	2.9	1.3-5.6	
Assistive Device	2.6	1.2-4.6	
Arthritis	2.4	1.9-2.9	
ADL Deficit	2.3	1.5-3.1	





Environmental Risk Factors

- ◆ Clutter
- ◆ Poor lighting
- ◆ Wheelchairs/bed not locked
- ◆ Slippery floors/Sharp Corners
- ◆ Pajama bottoms too long (trips)
- ◆ IV tubing and poles
- Environment not set up correctly
(bedside table moved, bed unlocked)



Environmental Risk Factors

- # IV poles/SCDs
- # Slippery soled shoes/ Stocking feet
- # Bare Feet
- # Use of assistive devices
- # (canes and walkers) that do not fit

Pearl-Patients are 11X more likely to fall if in bare or stocking feet.



Fall Risk Assessment

- ◆ Standardized, Validated Tools

- Morse
- Hendrich II
- Johns Hopkins

Hybrid/Institution Specific Tools



Fall Risk Assessment

- ◆ Johns Hopkins Fall Risk Assessment
- ◆ Quick and Easy to perform
- ◆ More sensitive in predicting falls for oncology patients



Screening-Will My Patient Fall?

Outpatient Screen

Have you fallen in the last year?

(OR 2.3-2.8)

Do you have a gait or balance problem?

(OR 2.4)



Fall Assessment

Assess the Patient's 3 M's:

◆ **Mentation**

- Acute Confusion
- Disorientation
- Depression

◆ **Medication**

- Benzodiazepines
- Epidural drugs
- Opioids

■ **Mobility**

- Know recent ability
- Know fall history

■ **Real Time Assessment:**

- Balance
- Strength
- Ability to move



How To Test For Mobility

- ◆ **Supine Assessment:**
 - Ankle ROM, Straight leg raise without bending knee
- ◆ **Sitting:**
 - Dizzy?
 - Trunk strength
 - Leg strength-rising from chair
- ◆ **Standing:**
 - Dizzy?
 - Weight shift, march in place

Step by step assessment will drive how every patient will be most safely mobilized



Match the Intervention to the Risk Factor-Confusion

- Bed alarm
- Fall mats-Use when pt is unattended
- Omni-belt-Use when pt is unattended
- Routine, attended toileting every 2-3 hours

Hourly Rounding (IHI Improvement Map)

- Do NOT use 3 side rails

Fall Mat



Match the Intervention to the Risk Factor-Confusion

- Avoid benzodiazepines as much as possible
- Schedule Physical Therapy
- If possible, mobilize patient 2-3 times per day
- Do not leave patient unattended on commode or toilet
- Use gait belt when mobilizing patient





Match the Intervention to the Risk Factor

◆ Depression

- Ensure clear path to bathroom
- Keep room free of clutter
- Give clear instructions to patient before mobilizing
- Encourage safe mobility
- Use a gait belt for transferring or ambulating patient



Match the Intervention to the Risk Factor

◆ Altered Elimination

- Routine toileting every 2-3 hours
- Non-skid slippers
- Fall mat for unattended patients and under commode
- Remove foleys as soon as possible
- Avoid benzodiazepines as much as possible
- Use a gait belt for when mobilizing patients



Match the Intervention to the Risk Factor

◆ Dizziness/Vertigo

- Have pt dangle legs for 20 seconds before standing
- Have pt wear non-skid slippers
- Consider PT consult for mobilization recommendation
- Do not leave patient unattended on commode or toilet
- Use gait belt when mobilizing pt
- Consider Hip Protectors



Match the Intervention to the Risk Factor

- ◆ Antiepileptics/Benzodiazepines*

Fall mat when patient is unattended

Routine toileting every 2-3 hours

Have pt dangle legs for 20 seconds before standing

Re-evaluate need for/dosage of benzodiazepines periodically

Use gait belt when mobilizing patient

*Consider these interventions for patients receiving opioids and/or epidural medication



Match the Intervention to the Risk Factor

◆ Weakness

PT consult

Stay close enough to the patient to make a difference

Obtain assistance from colleagues or lift team

Consider lift

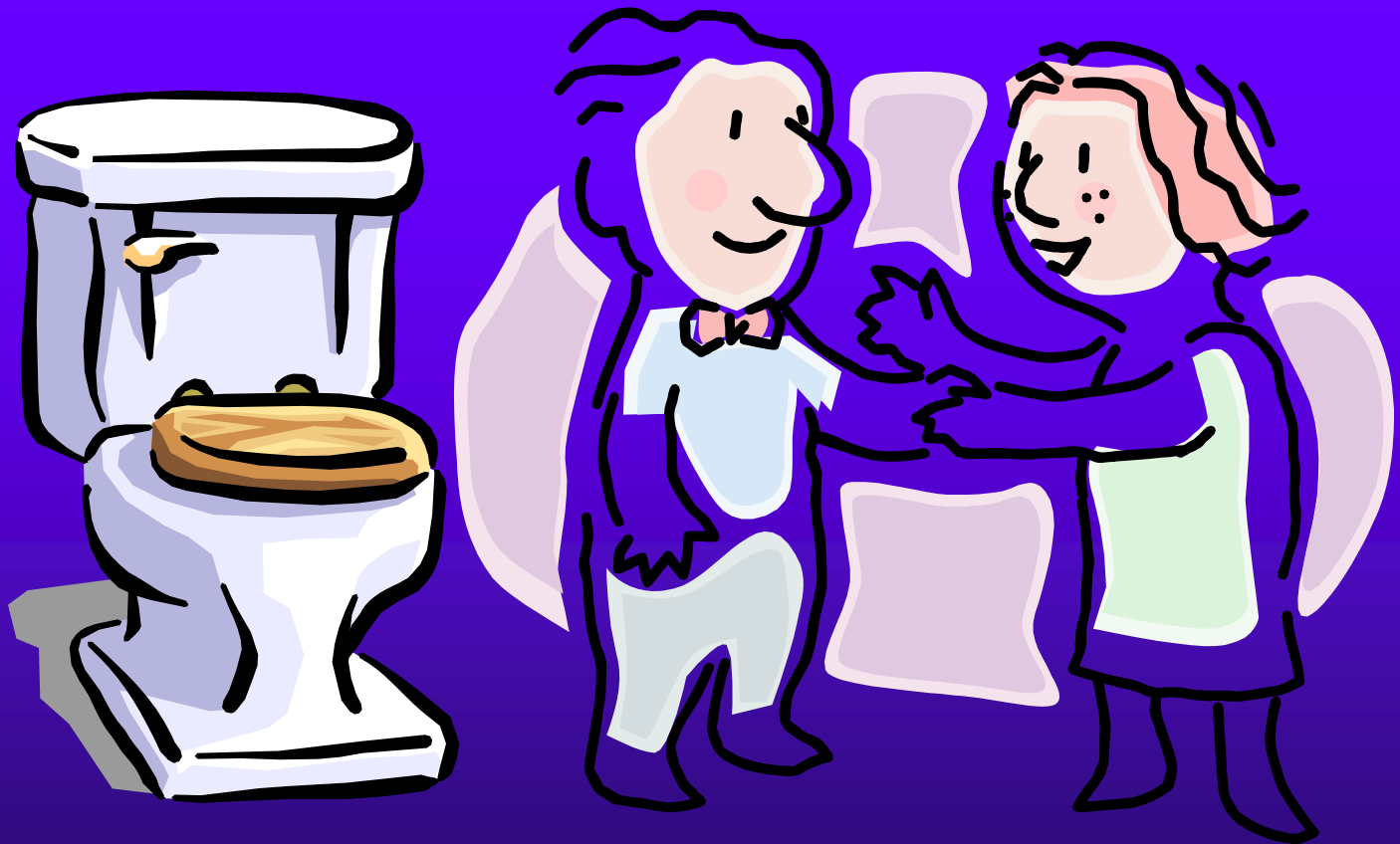
Do not leave pt unattended on commode or toilet

Non-skid slippers

Use the gait belt with every transfer

Consider Hip Protectors

It Takes 2-To-Toilet!





Population Based Approaches

- ◆ 28 Bed Ortho Unit
- ◆ Engaged Medical Partner
- ◆ Goal-↓ Falls by 50%



Population Based Prevention

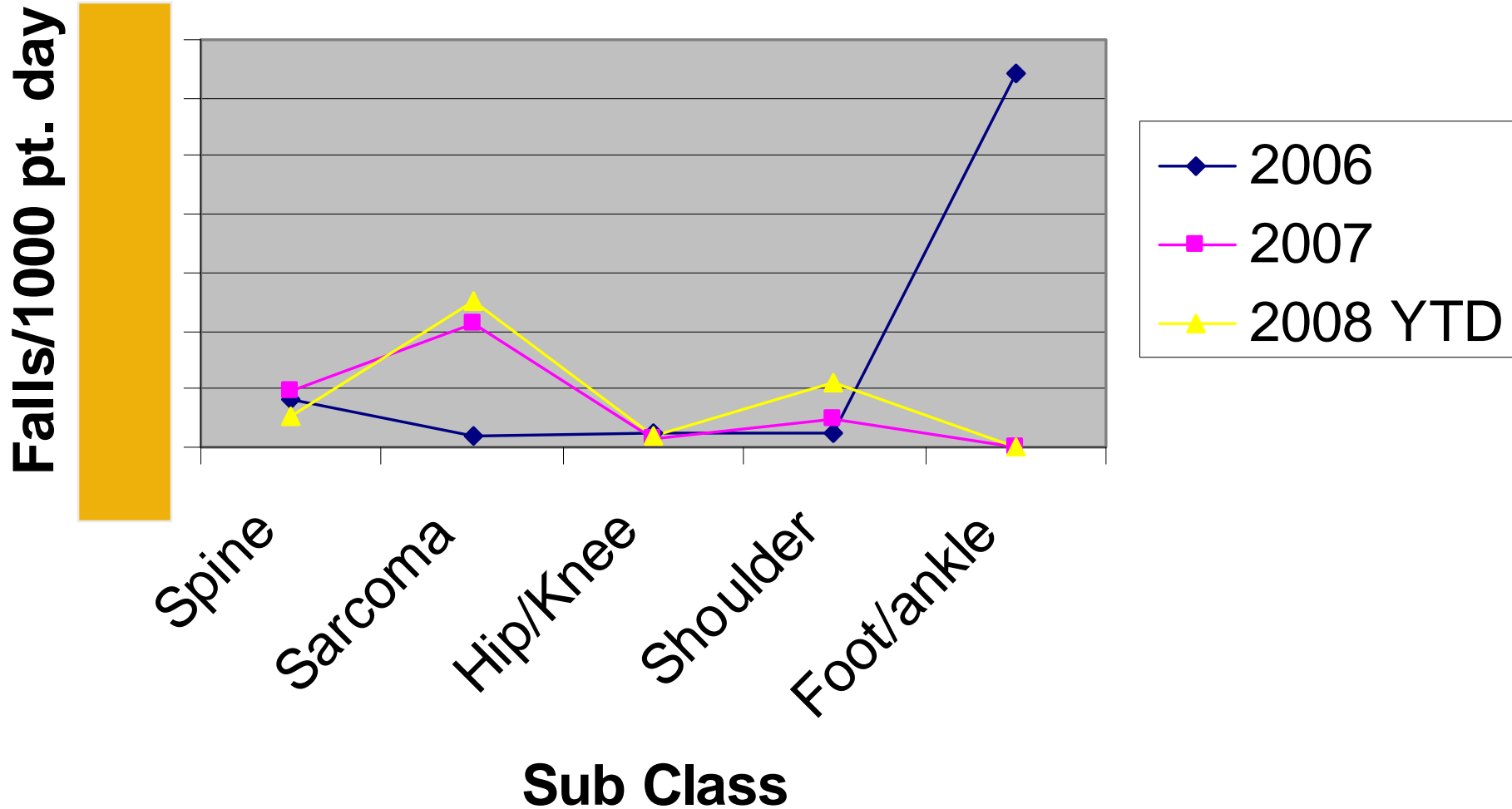
- ◆ Careful analysis of falls including
 - Type of surgery
 - Time of day
 - Medications
 - Related activities (Toileting)
 - Time since patient was seen by nurse



Population Based Prevention

- ◆ 71% of shoulder patients who fall are falling on POD “0”
- ◆ 55 % of all falls on 6SE related to Toileting
- ◆ Another 11% either left unattended or CO present
 - These falls are preventable!
- ◆ 38% of all falls on 6SE occur during shift changes

Ortho Falls by Sub Class



Fall work to be done

- “If you wake ‘em, take ‘em”.
 - Patients who have their vitals taken should be instructed that for their own safety, we recommend an assisted trip to and from the restroom.

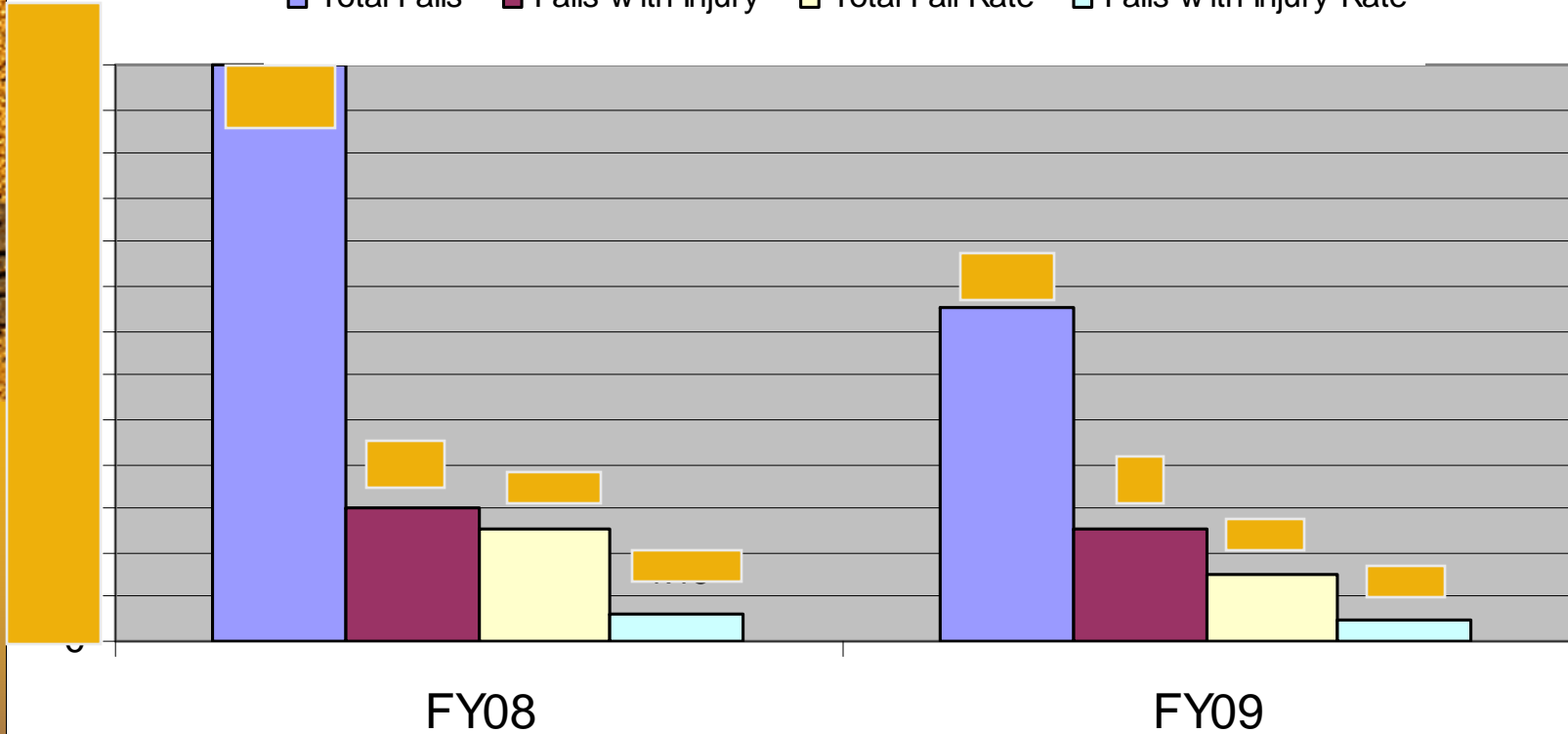
- “Timed toileting”
 - Every patient will be offered the chance to use the bathroom 3x/shift, either by a nurse or a HA.

Fall Work to be done

- “Assist in, Assist out”.
 - Every patient who requires assistance into the bathroom will be assisted back to bed and will not be left unattended.
- Shoulder Surgery
 - Shoulder surgery patients should be told that on their first night, we ask that they not get out of bed for any reason without assistance (to be reinforced in the shoulder clinic)

Patient Falls 6SE - July through February - FY08 compared to FY09

■ Total Falls ■ Falls with Injury ■ Total Fall Rate ■ Falls with Injury Rate



43% Reduction!



Pearls

- ◆ Focus on Your Population
- ◆ Build Safety into the Environment
- ◆ Use clinical judgment along with scale to determine risk

Consider Joining the Puget Sound Fall
Prevention Collaborative-
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Questions?

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