# Measuring Fall and Fall-Related Injury Rates and Prevention Practices

Presented by

Julia Neily, RN, M.S., M.P.H.
Veterans Health Administration
National Center for Patient Safety

# Welcome!

Thank you for joining this webinar about how to measure fall and fall-related injury rates and fall prevention practices.

# A Little About Myself…

- Work for VHA National Center for Patient Safety
- Have been a nurse since 1984
- Have worked with numerous teams in fall breakthrough series

# Today We Will Talk About

- Purpose of measurement
- Types of falls
- Types of falls to focus on
- Measuring fall and fall-related injury rates
- Measuring fall prevention practices

These topics were introduced in your 1-day training. Today, we will revisit them in depth.

Please make a note of your questions. Your Quality Improvement (QI) Specialists will follow up with you after this webinar to address them.

# Purpose of Measurement

Measuring fall and fall-related injury rates and fall prevention practices tells you—

- If any areas of care can be improved
- If you are meeting your aims
- If your changes are an improvement
- If you sustain your improvements

***If you can't measure it, you can't improve it!***

# Types of Falls

**Accidental falls**

May be caused by—

- Extrinsic environmental risk factors or hazards
  - Spills, clutter, tubing/cords
- Errors in judgment
  - Not paying attention

Action:

- Determine preventability.

# Types of Falls

**Anticipated physiological falls**

May be caused by—

- Known fall risks as indicated on the Morse Fall Scale
  - Loss of balance, impaired gait or mobility, impaired cognition/confusion, impaired vision, history of falls, decreased mobility upon assessment

Action:

- Determine preventability.

# Types of Falls

**Unanticipated physiological falls**

May be caused by—

- Factors associated with unknown fall risks that cannot be predicted on a fall risk scale
  - Unexpected orthostasis, extreme hypoglycemia, stroke, heart attack, seizure
- Action:

This type of fall is not preventable.

# Types of Falls To Focus On

- Report falls by type.
- Examine trends in preventable falls.
  - Example: Toileting-related falls
- Implement interventions related to the trend identified.
- Examine repeat falls.

# Measuring Fall and Fall-Related Injury Rates

- What to count
- Measures used
- Data needed
- How often to calculate
- Improving data

# What To Count for Fall and Fall-Related Injury Rates

- **Total** number of falls on your unit. Agree on a definition of “fall.”
- Number of **repeat** falls on your unit.
- **Level of injury** for each fall.
- Number of **occupied bed days** on your unit over a given period of time.

# Measures Used for Fall and Fall-Related Injury Rates

**Suggested approach**

- **Total** falls per **1,000** occupied bed days
- **Injurious** falls per **1,000** occupied bed days

***There are many ways to measure fall and fall-related injury rates. The most important thing is to* be consistent.**

See Section 5.1.7 (page 77) of the Toolkit for a link to the National Database of Nursing Quality Indicators.

# Data Needed for Fall and Fall-Related Injury Rates

For **each fall,** create an **incident report** that tells—

- **Fact** that the incident being reported is a fall
- **Name** of the patient who fell
- **Where** the patient fell
- **When** the patient fell
- **Unit** the patient was assigned to when he/she fell
- **Circumstances** of the fall (in detail)
- **Injury level** of the fall

Refer to Tool 5A: Information to Include in Incident Reports

# Data Needed for Fall and Fall-Related Injury Rates

You'll also need to know the **number of occupied beds** on your unit **each day.**

This is easier if your hospital has a computerized system. If **not**:

- Choose a time of day.
- Each day at that time, check the number of occupied beds on your unit.
- Write down that number.

# How Often To Calculate Fall and Fall-Related Injury Rates

Calculate fall and fall-related injury rates one time each month, if possible.

Refer to Toolkit Section 5.1.6

# How To Calculate Fall and Fall-Related Injury Rates

**Example:** Fall rate for month of April

1. Using incident reports, figure out the **total number of falls** on your unit during April.
2. Figure out the **number of occupied beds** on your unit **per day** during April.
3. Add up the **total number of occupied beds** on your unit in April by adding up all the beds per day from Step 2. If your hospital can give you the total, you can skip Step 2.
4. **Divide** the **total number of falls** by the **total number of occupied beds** on your unit in April.
5. **Multiply** this number by **1,000.**

# How To Calculate Fall and Fall-Related Injury Rates

**Example:** Fall rate for your unit in month of April

**Total number of falls** = 3

**Total number of occupied beds** = 879.

**Total number of falls** divided by **total number of occupied beds** = 3 ÷ 879 = 0.0034.

**0.0034 × 1,000 = 3.4.**

Fall rate = 3.4 falls per 1,000 occupied bed days

# Improving Data for Fall and Fall-Related Injury Rates

- Review completed incident reports with staff each month.
- Discuss ways to improve, such as giving more details about fall circumstances.
- Examine trends in root causes.

# Improving Data for Fall and Fall-Related Injury Rates

- Examine trends in fall rates such as—
  - Falls related to toileting needs
  - Falls related to risk factors (medicines, blood pressure, gait)
  - Falls related to the environment (poor lighting, uneven or slippery floors)

# Measuring Fall Prevention Practices

**Process measures**

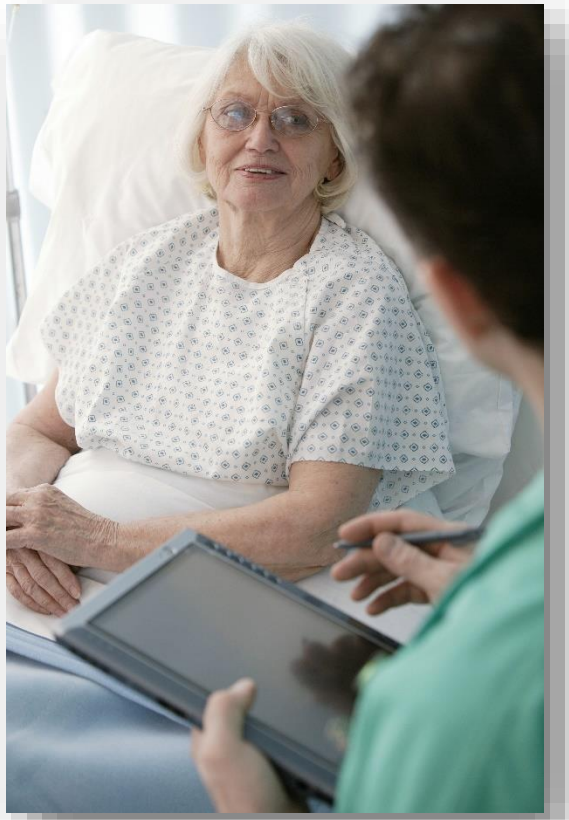
- Post-fall assessment (huddle)
- Intentional rounding
- Fall prevention and care planning

Refer to Tool 5B: Assessing Fall Prevention Care Processes

# Post-Fall Assessment (Huddle)

**Clinical review—**

- Collects data after a patient falls
- Seeks to find out if the patient has immediate risk of injuries or other complications
- May include new fall risk factor assessment with medicine review and lab tests



# Post-Fall Assessment (Huddle)

**Clinical review** may include—

- Checks for signs or symptoms of fracture or possible spine injury before moving patient
- Safe handling methods for patients with signs or symptoms of fracture or possible spine injury
- Regular neurologic checks for all patients with possible or confirmed head injury
- Medical exams
  - Sooner for patients who may have serious injury or who have been immobilized

# Post-Fall Assessment (Huddle)

**Root cause analysis (RCA)—**

- Helps you understand why a patient fell
- Helps you prevent future falls in this and other patients
- Captures data about a fall from the patient, staff, and other witnesses

# Post-Fall Assessment (Huddle)

**Barriers** include—

- Competing commitments
- Lack of witnesses
- Multiple causes of a fall
- Trouble assembling relevant team members

# Post-Fall Assessment (Huddle)

**Strategies** include—

- Having a standard protocol that is easily accessible to unit staff
- Making sure the data gathered with the assessment tool include those needed to file an incident report
- Having a nurse or pharmacist join rounds to discuss medicines that may have caused the fall

# Post-Fall Assessment (Huddle)

Ways to **document** include—

- Care plan
- Incident reporting system
- Risk factor profile

Ways to **communicate** include—

- Oral handoff
- Safety huddle

See Section 5.1.6 (page 76) of the Toolkit for an example of the post-fall huddle.

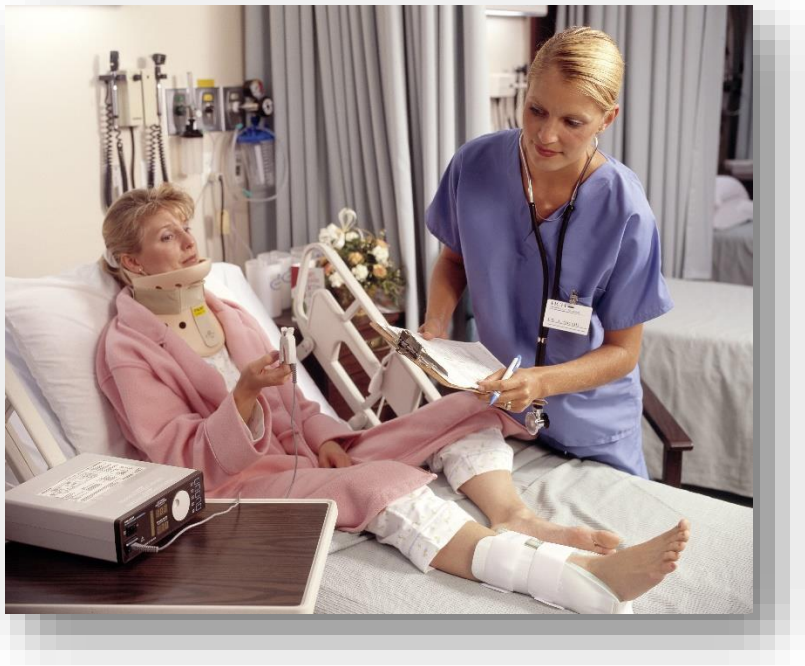
# Data To Measure Fall Prevention

Data can come from—

- **Medical record reviews**
  - This approach may be **incomplete,** because it relies only on the written record.
- **Direct observations of care by trained observer**
  - This approach is the **most time consuming,** but it's also the **most accurate.**
- **Surveys of staff**
  - This approach relies on memory, so it may be **inaccurate.**

# Data To Measure Fall Prevention

- Start with a combination of medical record review and direct observation.
- Use a manageable sample, such as no more than 20 patients.



# Fall Prevention and Care Planning

**Remember:**

- Assess fall and fall-related injury risk **each time** a new patient is admitted.
- Make sure the individualized care plan is tailored to the patient's fall risk factors.
- This targeted approach will reduce the incidence of falls at your hospital and improve the quality of patient care.

# Today We Talked About

- Purpose of measurement
- Types of falls
- Types of falls to focus on
- Measuring fall and fall-related injury rates
- Measuring fall prevention practices

# Any Questions?

Thank you for being such great listeners.

Please refer any questions you have to your QI Specialists.

# Resources


- Ganz DA, Huang C, Saliba D, et al. Preventing falls in hospitals: a toolkit for improving quality of care. (Prepared by RAND Corporation, Boston University School of Public Health, and ECRI Institute under Contract No. HHSA290201000017I TO #1.) Rockville, MD: Agency for Healthcare Research and Quality; January 2013. AHRQ Publication No. 13-0015-EF.
  - Tool 3F: Orthostatic Vital Sign Measurement
  - Tool 3G: STRATIFY Scale for Identifying Fall Risk Factors
  - Tool 3H: Morse Fall Scale for Identifying Fall Risk Factors
  - Tool 3I: Medication Fall Risk Scale and Evaluation Tools
  - Tool 3J: Delirium Evaluation Bundle
  - Tool 3K: Algorithm for Mobilizing Patients
  - Tool 3L: Patient and Family Education
  - Tool 3M: Sample Care Plan
  - Tool 3N: Postfall Assessment, Clinical Review
  - Tool 3O: Postfall Assessment for Root Cause Analysis
  - Tool 3P: Best Practices Checklist
  - Tool 5A: Information to Include in Incident Reports
  - Tool 5B: Assessing Fall Prevention Care Processes
  - Tool 5C: Measuring Progress Checklist
- Morse JM. Predicting patient falls. CA: Sage Publications; 1997.
- Morse JM. Preventing patient falls. 2nd ed. New York: Springer; 2009.