Today’s Topics

• Housekeeping

• Updates from the AFYA Team – Upcoming Webinar topics

• Evidence for Fall Prevention Strategies / Answers to your questions
  – Pat Quigley, PhD, ARNP, CRRN, FAAN, FAANP

• Additional questions and open discussion

• Wrap-up
Housekeeping

• Raise your “hand” to contribute to the discussion or ask a question.

OR

• Use the CHAT panel.

• Mute your audio to minimize background noise.

OR

• Mute your phone.
Updates from the AFYA Team

- **January Webinar**
  - Patricia Dykes, PhD, RN, FAAN, FACMI
    - Care planning for individual fall risks and the EHR.

- **February – April Webinars**
  - Hospital updates on implementation efforts
Evidence for Fall Prevention Strategies

Pat Quigley, PhD, ARNP, CRRN, FAAN, FAANP
Veterans Integrated Service Network 8
Patient Safety Center of Inquiry
and Nurse Consultant
http://www.visn8.va.gov/patientsafetycenter/fallsTeam/default.asp
Topics

- Putting discussion into context: Considering the level of evidence
- Joint Commission Sentinel Alert
- Targeted Interventions
  - Bed Alarms
  - Bed Rails
  - Surveillance Strategies, including rounding
  - Protective equipment
- Prevention strategies for patients with mental/behavioral health disorder (including people who intentionally fall)
- Post fall huddles – using the data
- Population-based Approach to Fall and Injury Reduction (A,B,C,S)
- Answers to other questions
From Knowledge to Improving Outcomes

Integration of Complementary Perspectives

Knowledge $\rightarrow$ Knowledge Transfer $\rightarrow$ Innovation Diffusion $\rightarrow$ Evidence-based Practice $\rightarrow$ Outcome
Evidence-based Practice (Sackett)

“...the conscientious use of current *best evidence* in making decisions about the care of individual patients or the delivery of health services.”

Innovation Diffusion (Rogers)

The *process of communicating new ideas* through certain channels over time among members of a social system.

Knowledge Transfer (Dixon)

Sharing of *common knowledge*, that is the knowledge that employees learn from doing the organization’s tasks.
Review Research, Clinical and Laboratory Information

Is evidence strong enough to warrant practice change?

Yes → Implement evidence-based practice

No

Does evidence support clinical trials?

Yes → Technology Transfer

No

Clinical trial to test interventions

Yes

Epidemiological study to identify modifiable risk factors for adverse events or descriptive studies to understand process and outcomes

No

Equipment design or redesign

Is equipment ready for Market?

Yes
Grading Systems

Apply use of scientific hierarchy and evidence rating scales.
<table>
<thead>
<tr>
<th>Level</th>
<th>Type of Research</th>
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<tbody>
<tr>
<td>Level I</td>
<td>Meta-Analysis (Combination of data from many studies)</td>
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<tr>
<td>Level II</td>
<td>Experimental Designs (Randomized Control Trials)</td>
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<tr>
<td>Level III</td>
<td>Well designed Quasi Experimental Designs (Not randomized or no control group)</td>
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<tr>
<td>Level IV</td>
<td>Well designed Non-Experimental Designs (Descriptive-can include qualitative)</td>
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<td>Level V</td>
<td>Case reports/clinical expertise</td>
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<td>United States Preventive Services Task Force (USPSTF) Grading</td>
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<tr>
<td>---------------------------------------------------------------</td>
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<tr>
<td>A</td>
<td>Strongly recommended; Good evidence</td>
</tr>
<tr>
<td>B</td>
<td>Recommended; At least fair evidence</td>
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<tr>
<td>C</td>
<td>No recommendation; Balance of benefits and harms too close to justify a recommendation</td>
</tr>
<tr>
<td>D</td>
<td>Recommend against; Fair evidence is ineffective or harm outweighs the benefit</td>
</tr>
<tr>
<td>I</td>
<td>Insufficient evidence; Evidence is lacking or of poor quality, benefit and harms cannot be determined</td>
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AHRQ Toolkit: “Best Practices”

In the context of this toolkit, — best practices‖ refers to both:
(1) a standard way of developing, implementing, and sustaining a hospital fall prevention program; and
(2) those clinical care processes that, based on literature and expert opinion, represent the best way of preventing falls in the hospital. (p.2)
Co-Principal Investigators:

- Paul G. Shekelle, M.D., Ph.D., RAND Corporation Evidence-based Practice Center
- Robert M. Wachter, M.D., University of California, San Francisco
- Peter J. Pronovost, M.D., Ph.D., Johns Hopkins University

• Since 2001 report, a vast amount of new information on PSPs has emerged; more agreement is now evident on what constitutes evidence of effectiveness and the importance of implementation and context.
Evidence Reviews: Rating

Evidence of Effectiveness (low, moderate, high; benefits outweigh harm)

Evidence of on potential for harmful unintended consequences (high, moderate, low, negligible)

Estimate of costs (low, moderate High)

Implementation issues: How Much Do We Know? How Hard Is It to Implement?
The Scope of Patient Risk

• While much effort and attention has been focused on reducing hospital adverse conditions, patient fall with injury, harm still occurs

• Need to “step up our game” and move at a more robust pace

• Share success stories; spread solutions

• Move away from a score/level of fall risk

• 2015: The Joint Commission (TJC) Sentinel Alert
TJC Sentinel Event Statistics

Fall-related Events
Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

Number of Events Reviewed by TJC


The reporting of most sentinel events to The Joint Commission is voluntary and represents only a small proportion of actual events. Therefore, these data are not an epidemiologic data set and no conclusions should be drawn about the actual relative frequency of events or trends in events over time.

Office of Quality Monitoring - 10
Most common contributing factors pertain to:

- Inadequate assessment
- Communication failures
- Lack of adherence to protocols and safety practices
- Inadequate staff orientation, supervision, staffing levels or skill mix
- Deficiencies in the physical environment
- Lack of leadership
TJC Sentinel Event Alert

Actions suggested by TJC:

1. Lead an effort to raise awareness of the need to prevent falls resulting in injury

2. Establish an interdisciplinary falls injury prevention team or evaluate the membership of the team in place

3. Use a standardized, validated tool to identify risk factors for falls

4. Develop an individualized plan of care based on identified fall and injury risks, and implement interventions specific to a patient, population or setting
TJC Sentinel Event Alert

Actions suggested by TJC:

5. Standardize and apply practices and interventions demonstrated to be effective, including:
   – A standardized hand-off communication process
   – One-to-one education of each patient at the bedside

6. Conduct post-fall management, which includes:
   – Post-fall huddle
   – A system of honest, transparent reporting
   – Trending and analysis of falls which can inform improvement efforts
   – Continued reassessment of the patient
Targeted Interventions
Prevention + Protection + Surveillance

Prevention
• The act of preventing, forestalling, or hindering

Plus Protection
• Shield from exposure, injury or destruction (death)
• Mitigate or make less severe the exposure, injury or destruction

Plus Surveillance
• Detection
Fall Risk and Injury Risk

Reminder Dialog Template: VANOD Fall Risk

OTHER RISK FACTORS
Other risks (choose 1 or more)

- History of falling (if 'yes' response to Morse Fall Scale Q1)
  Answer both questions
  1. Obtain additional fall history:
     contributing factors to falls
     frequency of falls in the last three months
     any other pertinent history

    Fall History:

    *

  2. Did patient/resident have a history of injury with prior falls?
    - No
    - Yes - Injury with Fracture
    - Yes - Injury without Fracture
    - Unknown history of injury or injuries

Secondary Diagnosis (if 'yes' response to Morse Fall Scale Q2)
Neither of the above (no history of falling and no secondary diagnosis)

FALL RISK ASSESSMENT

OTHER RISK FACTORS
History of Falling
Bed Alarms

• Evidence suggests that they do not prevent falls

• Were not designed to prevent falls

• Were designed for an early warning system

• Appropriate use includes:
  – Cognitively Impaired Patients
  – Able to get up without help or try to
  – Fail teach-back
Fall-Related Outcomes Not Improved

- Shorr, et al., (2013) published the results of a cluster randomized trial (AHRQ II), which was randomized at the unit-level.

- There were no significant pre–post differences in (but there were trends in the results:
  - Change in fall rates (from baseline to intervention period)
  - Number of patients who fell
  - Injurious fall rates
  - Number of patients physically restrained on intervention units compared with control units

- Cluster RCT Risk Ratio of falls 1.09 (0.85-1.53); DID, 0.41 [CI, 1.05 to 2.47])

- Bed Alarms – intuitive like rails & restraints, but not effective and may cause harm
Assistive Technology for Safe Mobility-Bed & Chair Monitors

- AirPro Alarm
- Locator Alarm
- Bed & Chair Alarm
- Chair Sentry
- Economy Pad Alarm
- Floor Mat Monitor
- Keep Safe
- QualCare Alarm
- Safe-T Mate Alarmed Seatbelt
Bed Rails

• Used for a mobility aid
• Never used to prevent falls
• Why? This knowledge dates back to the 1980s...

http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/GeneralHospitalDevicesandSupplies/HospitalBeds/ucm123676.htm

• Appropriate use includes:
  – Mobility/transfer aid
  – Use technology integrated in bed rail
Surveillance Systems - Emerging Technology

• Remote Patient Monitoring
  – Mobility and Wandering – Location Tracking
  – Fall Detection

• Real-time Surveillance: Care-View, AvaSys
  – Wireless
  – Camera Systems

• Ambulatory Aides
  – Laser Light
Can you describe how you have seen “camera surveillance” instituted as a detection method?

With detox patients with impulsivity, are there triggers for getting a sitter?

What is the evidence for intentional rounding as a surveillance method?
• **Forde-Johnston C** (2014) Intentional rounding: a review of the literature.*
  
  – Nurses currently use the ‘4 Ps’ (positioning, personal needs, pain and placement)
  
  – 20 articles found since 2006, all included in the review
  
  – 9 primary research studies (8 US, 1 Australia) examined the effect of intentional rounding on patient care outcomes and staff perceptions were found.
  
  – 9 studies (UK), none had IRB approval

*Nursing Standard. 28, 32, 37-42. Date of submission: November 6 2013; date of acceptance: January 10 2014.

Intentional rounding involves carrying out regular checks on individual patients to anticipate and deliver fundamental care rather than responding to a patient ringing a call bell (Studer Group 2007)
Results – Intentional Rounding

• A 36% decrease in the monthly average of low-consequence patient falls was reported in one UK hospital within one month of the introduction of intentional rounding (Braide 2013).

• Meade et al (2006) reported a 50% decrease in falls following the implementation of intentional rounding in US hospitals.

• US studies showed no significant effect on incidence of falls when intentional rounding was conducted every two hours compared with every hour (Meade et al 2006, Studer Group 2007, Halm 2009).
Intentional Rounding

• Studies lack methodological rigor (implementation, fidelity, reliability).

• Current research is fragmented and focuses on clinical outcomes rather than the context in which the rounds take place.

• There are no data comparing the use of intentional rounding with other appropriate nursing approaches that involve regular contact with patients.

• Current expert advice (Pat’s) - the following rounding practices are most relevant to fall prevention:
  – Scheduled toileting rounding for select patients (on bladder retraining or need assistance to toilet)
  – Toileting before pain medication
  – Pre-shift huddles to id those who need toileting more than q hr.
Protect from Injury: Protective Equipment

Protecting Patients from Harm – Our Moral Imperative
Bedside Mats – Fall Cushions

CARE Pad bedside fall cushion

NOA Floor Mat

Posey Floor Cushion

Tri-fold bedside mat

Roll-on bedside mat

Soft Fall bedside mat
Feet First Fall from Bed

No Floor Mat, fall over top of bedrails: ~40% chance of severe head injury

No Floor Mat, low bed (No Bedrails): ~25% chance of severe head injury

Low bed with a Floor Mat: ~ 1% chance of severe head injury
Technology Resource Guide: Bedside Floor Mats

- Bedside floor mats protect patients from injuries associated with bed-related falls.
- Targeted for VA providers, this web-based guidebook* will include: searchable inventory, evaluation of selected features, and cost.

*http://www.patientsafety.va.gov/professionals/onthejob/falls.asp
Hip Protectors
This web-based toolkit* will include:

- prescribing guidelines
- standardized CPRS orders
- selection of brands and models
- sizing guidelines
- protocol for replacement
- policy template
- laundering procedure
- stocking procedure
- monitoring tools
- patient education materials
- provider education materials

*http://www.patientsafety.va.gov/professionals/onthejob/falls.asp
Your Equipment-Related Questions

- Has there been anything published on the effectiveness of hip savers for injury reduction?

- What does research show about using posey beds as a fall prevention strategy? (Risks vs. benefits and unintended consequences)

- Suggestions on how to keep items needed close to the patient (bedside tables don’t work) in cases where low beds with mats are in use?

- Any tips for working with patients with sequential compression devices to prevent falls?
 Moderate to Serious Injury

- Those that limit function, independence, survival
- **Age**
- **Bones (fractures)**
- **AntiCoagulation** (hemorrhagic injury)
- **Surgery** (post operative)
Mental Health, Psychiatric, and/or Neurological Conditions: Prioritized

• Culture of Psychiatry units
• Lack of assessment/screening for falls
• Unit peer leadership issues
• Medication risk factors
• Communication at handoffs
• Gaps in technology and work with vendors
• Toileting
• Physical barriers/equipment limitations
• Dealing with intentional falls
Falls are often related to psychiatric comorbidities, detox, and substance abuse. What are the top things we should be doing to prevent falls in these patients?

What are other hospitals doing with patients who have alcohol withdrawal, delirium or other behavioral issues contributing to falls?

How to reduce falls in patients that have dementia?
How do you synthesize data obtained across huddles and how do you use it?
Outcomes of Post-Fall Huddles

- Specify root cause (proximal cause).
- Specify type of fall.
- Identify actions to prevent reoccurrence.
- Change plan of care.
- Involve patient (family) in learning about the fall occurrence.
- Prevent repeat falls.
Formative Measures

• Structures
  – Who attends (nursing and others) – count them
  – Changed plan of care—add actions to your run chart: annotated run chart; capture interventions

• Processes
  – Timeliness of post-fall huddle (number of minutes)
  – Timeliness of changing plan of care
  – Time to implemented changed plan of care
Summative Outcome

• Prevent repeat falls.
  – Same root cause and same type of fall.

• Reduce costs associated with falls and fall-related injuries.
Look for Trends and Target Interventions

• Preventable falls related to toileting
  – Notification
  – Observation

• Falls related to environmental causes
  – Doorways
  – Shower stalls
  – Long bedspreads

• Lunch and other breaks or shift hand-off

• Days of the week (barbershop/activities)
Your Staff Engagement Questions

☒ How should hospitals engaging physicians in falls prevention? How do you get past the point of view that the problem is that nurses need to answer call bells faster?

☒ How do we engage staff nurses to value the use of the falls risk assessment tool?

☒ What is the best way to present fall data effectively - to all, from Leadership to front line staff?
Your Patient Education Questions

☒ Are there any free easy to read/low literacy patient education materials for patients and families that you would recommend on fall prevention?

☒ How do you communicate with the patient that they are at risk for a fall?
Other Questions

- We notice more falls over night, is that related to less staff, check less often, or darker? Do you have any information to help reduce falls overnight?

- Has the literature shown any evidence of the effectiveness of a particular bundle of interventions for high risk patients? If so, what is included in that bundle?

- What are the best practices/interventions for patients that are repeat fallers?

- List of best practices that Dr. Quigley would put into a falls program if starting from scratch.

- Quite a few of our falls in the rehab unit are where the patient is being lowered to the ground or chair by the therapist, meaning that the patients are being “challenged” in therapy to improve strength/mobility and this can result in “assisted” falls. We count these as falls. Any suggestions for these situations?
Your Measurement Questions

- How are other hospitals calculating bed days? Are patient days the same?

- How are other hospitals handling falls in observation patients? Are they included or excluded from your fall rates?
Universal Injury Prevention

• Educates patients / families / staff
  – Remember 60% of falls happen at home, 30% in the community, and 10% as inpatients.
  – Take opportunity to teach

• Remove sources of potential laceration
  – Sharp edges (furniture)

• Reduce potential trauma impact
  – Use protective barriers (hip protectors, floor mats)

• Use multifactorial approach: COMBINE Interventions

• Hourly Patient Rounds (comfort, safety, pain)

• Examine Environment (safe exit side)
Toolkits and Best Practice Recommendations for Fall Prevention

AHRQ Falls Prevention Toolkit

VA NCPS Falls Toolkit

ICSI Prevention of Falls Protocol

IHI Reducing Patient Injuries from Falls How-to Guide


Shifting

• From Reducing Falls to Protecting from Fall Related Injury

• Integrate Injury Risk /History on Admission

• Implement Universal Injury Reduction Strategies

• Implement Population-Specific Fall Injury Reduction Interventions
My Mr. Goober
My Oreo
My Jethro
Pat And Her Mom
Getting ready to dance
Next Session:
January 20, 2016
Dr. Patricia Dykes
Care Planning and Use of the EHR

Please complete the Webinar evaluation survey.
Thank you!