So
What If
I Fall?

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The presenters have nothing to disclose.
Center for Medicare and Medicaid Services

Quality Initiatives

- Hospital compare
- Nursing Home Compare
- Home Health Compare
- Ambulatory Surgical Care
- Physicians
Pay for performance

- Hospital value-based purchasing program
- Physician quality report
- Medicare advantage plan
Joint Commission

National Patient Safety Goals

- Reduce the risk of patient harm resulting from fall
- Assess the patient's risk for falls
- Implement interventions to reduce falls based on the patient's assessed risk
- Educate staff on the fall reduction program in times frames determined by the organization
- Educate the patient and, as needed, the family on any individualized fall reduction strategies.
- Evaluate the effectiveness of all fall reduction activities including assessment, interventions, and education.
Impact of Falls - National

• 1 of 3 adults age 65 or older fall each year, < 50% report it to their PCP
• Among older adults, leading cause of fractures and injury death
• Most common cause of nonfatal injuries, traumatic brain injury, and hospital trauma admissions, and
• In Year 2010, 2.3 million nonfatal injuries among older adults treated in ER
• In Year 2010, direct medical costs of falls (adjusted for inflation) was $30 Billion
• Fear of Falling ➔ Decrease Activity ➔ Decrease Mobility ➔ Decrease P.Fitness ➔ actual risk of Fall
Impact of Falls - Oregon (2010-2011)

- Among older adults age 65 and over fatal rate of falls = 87 per 100K
- Among older adults 85 and over fatal rate of falls 26 times > 65-74 yo
- Older adults 85 and older: rate of fatal falls increased 31% from year 2006-2010
- Rate of fall 1.5X than national rate
- Among hospitalized older adults 85 and over rate of falls = 3,245 per 100K
- Men > Females: risk of falls
- Women 1.7X likely to be hospitalized from a fall than men
Methodology

- Solicited data from OHA providers
- Compiled and reviewed data / Information
- F/U Questionnaires
- Reviewed interventions for Best Practice
- Conclusions
1 – 9% - Fall Reduction program in place and measured
2 – 21% Fall Reduction program in place and not measured
3 – 28% - No Fall Reduction program
4 – 42% - Did not participate
## Hospice Providers with Fall Reduction Program

<table>
<thead>
<tr>
<th>Adventist Health*</th>
<th>Legacy Hospice*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashland Community Hospice</td>
<td>Lower Columbia Hospice</td>
</tr>
<tr>
<td>Coastal Home Health and Hospice</td>
<td>Peace Health Hospice SW*</td>
</tr>
<tr>
<td>Grand Ronde HH and Hospice</td>
<td>Peace Health Peace Harbor Hospice*</td>
</tr>
<tr>
<td>Hospice of Sacred Heart*</td>
<td>Providence Hospice*</td>
</tr>
<tr>
<td>Hospice of the Northwest</td>
<td>Samaritan Evergreen Hospice</td>
</tr>
<tr>
<td>Hospice of Washington County</td>
<td>Signature Hospice</td>
</tr>
<tr>
<td>Kaiser Permanente*</td>
<td>Southcoast Hospice</td>
</tr>
</tbody>
</table>
Fall Definition

- **MAHC** - unintentional change in position resulting in coming to rest on the ground or at a lower level.

- **CMS** – unintentionally coming to rest on the ground, floor, or other lower level, but not as a result of an overwhelming external force (e.g., resident pushes another resident).

- **CDC**: Injury received when a person descends abruptly due to the force of gravity and strikes a surface at the same or lower level.

- **WHO**: An event which results in a person coming to rest inadvertently on the ground or floor or other lower level.
Fall Definition

- Tinetti, Speechley, and Ginter - an event which results in a person coming to rest unintentionally on the ground or lower level, not as a result of a major intrinsic event (such as a stroke) or overwhelming hazard. (non-hospitalized geriatric population)

- Agostini, Baker, and Bogardus - an unintentionally coming to rest on the ground, floor, or other lower level, but not as a result of syncope or overwhelming external force. (inpatient, acute, and long-term care)

- Nevitt, Cummings, and Hudes - falling all the way down to the floor or ground, or falling and hitting an object like a chair or stair

- ANA–NDNQI - an unplanned descent to the floor (or extension of the floor: e.g., trash can or other equipment) with or without injury.
Fall Definition - OHA Providers

- A loss of balance resulting in unintentional coming to rest on the ground or other surface.
- An unintentional change in position resulting in coming to rest on the ground or at a lower level.
- An unintentional, sudden event which results in a person coming to rest inadvertently on the ground or floor or other lower level.
- An event which results in a person coming to rest inadvertently on the ground or floor or other lower level.
So What if I Fall?

- Patient Quality Of Life
- Devastating
- Deadly (no pun intended)
- Costly
- Preventable
Not Re-inventing the Wheel!

Info from presentation are referenced from:

- CDC
- National Safety Council
- Home Health Quality Improvement National Campaign
- Experiential feedback from OHA providers
- Research material – see reference
Best Practice
Cross-Disciplinary approach

- Nurse
- Therapist (PT, OT)
- MSW
- Aide
- Physicians
- Pharmacist
Cross-Disciplinary approach – OHA Providers

- Hospice Manager - MSW
- Nurse (Staff, QA, Triage) - Aide
- Therapist (PT, OT) - Physicians
- Pharmacist - IDG Team Leaders
- Hospice Team Managers - Program Director
- QAPI - Informatics Analyst
- Bereavement Coordinator - Volunteer Manager
- Aide - Chaplain
Understanding Risk Factors For Falls among Hospice Patient Population

- **Biological**
  - Mobility problems due to muscle weakness or balance problems
  - Chronic health conditions such as stroke, arthritis, end stage Cancer/CHF, Alzheimers
  - Vision changes and vision loss
  - Loss of sensation in feet (neuropathy)

- **Behavioral**
  - Inactivity
  - Medication side effects and interactions
  - Alcohol / Marijuana use

- **Environmental**
  - Home and environment hazard (clutter, poor lighting, stairs, rugs)
  - Incorrect size, type, or use of assistive devices (Walkers, canes, crutches, Shoes etc.)
  - Tubings (Cath, oxygen)
  - Pets
Etiology of falls among cognitively intact hospice patients

- Past Hx of Falls
- Physically more functional
- Fear of losing independence
- Avoid asking for help
- Feel uneasy about asking for help
Fall Reduction Program
Best Practice

Fall Reduction Program four priorities:

• 1. Fall Risk Assessment
• 2. Proactive Fall Interventions
• 3. Patient and Caregiver Education
• 4. Evaluation of Fall Prevention Program
1. Fall Risk Assessment

10 Core Elements

- Age 65+
- Hx of Falls last 3 months
- Visual Impairment
- Environmental Hazard
- Pain affecting level of function
- Dx (3 or Co-morbidities)
- Incontinence
- Impaired functional Mobility
- Poly Pharmacy (4 or more prescriptions)
- Cognitive Impairment
Sample Fall Risk Assessment Tool - Literature

<table>
<thead>
<tr>
<th>Type:</th>
<th>Admission</th>
<th>Recertification</th>
<th>Post-fall</th>
<th>Other</th>
<th>Pt. location:</th>
<th>Home</th>
<th>ALF</th>
<th>AFH</th>
<th>NH</th>
<th>Hospice center</th>
</tr>
</thead>
</table>

**Ambulatory Status**

Ambulatory patient

**STOP:** If patient is non-ambulatory – fall risk is zero by definition – no further assessment needed. Implement standard safety measures if patient is restless/agitated and at risk of falling out of a chair/bed. Consider PT for safety training.

### Ambulatory/Semi Ambulatory Patient

**Ambulatory patient**

- Age 80 or older
- Altered elimination (i.e., urgency, incontinence)
- Altered mental status (i.e., confusion, disorientation)
- Environmental dangers (i.e., tripping/slipping hazards, poor lighting)
- History of falls
- Impaired mobility (i.e., weakness, dizziness, use of assistive devices)
- Impaired vision
- Use of medications for pain, anxiety, sedation, psychosis, depression, diuresis, etc.

**Total Score**

Score of 1 or more indicates high risk. The higher the patient’s score, the higher their fall risk.

### Interventions Provided

<table>
<thead>
<tr>
<th>Education</th>
<th>Alarm system devices (i.e., bed alarm, call bell, pendant)</th>
<th>Environmental hazards</th>
<th>Individual fall risks and safety management techniques</th>
<th>Medication side effects related to falling</th>
<th>Mobility instruction (i.e., gradually sit up before standing)</th>
<th>Proper use of devices (i.e., walker, w/c, urinary, BSC)</th>
<th>Need for increased supervision/assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Demonstrated understanding</td>
<td>Requests more information</td>
<td>Needs further education</td>
<td>Likely to follow through</td>
<td>Resistant to ideas</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response to Education:</th>
<th>Pt.</th>
<th>Fam</th>
<th>CG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implemented/recommended assistive devices and encouraged their use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implemented/provided resources for alarm system (personal alarm, bed alarm, call bell, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implemented/recommended environmental changes (remove hazards, lower bed, improve lighting, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implemented/recommended increased supervision/assistance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scheduled PT and/or OT evaluation for mobility/transfer techniques and/or assistive device recommendations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Comments:

**Care Coordination:**

- Pt/Fam/CG
- RN/LPN
- MSW
- MD
- Pharmacist
- CNA
- PT/OT
- DME
- Facility staff
- Chaplain
- Vol
- Ins. CM

**Clinician Signature**

**Date**

**Time**

**PATIENT NAME** (Last name first)
**MAHC 10 - Fall Risk Assessment Tool**

*Click here* to review the Validation Study of the Missouri Alliance for Home Care’s fall risk assessment tool.

Conduct a fall risk assessment on each patient at start of care and re-certification.

<table>
<thead>
<tr>
<th>Required Core Elements</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age 65+</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Diagnosis (3 or more co-existing)</strong> Includes only documented medical diagnosis</td>
<td></td>
</tr>
<tr>
<td><strong>Prior history of falls within 3 months</strong> An unintentional change in position resulting in coming to rest on the ground or at a lower level</td>
<td></td>
</tr>
<tr>
<td><strong>Incontinence</strong> Inability to make it to the bathroom or commode in timely manner Includes frequency, urgency, and/or nocturia.</td>
<td></td>
</tr>
<tr>
<td><strong>Visual impairment</strong> Includes but not limited to, macular degeneration, diabetic retinopathies, visual field loss, age related changes, decline in visual acuity, accommodation, glare tolerance, depth perception, and night vision or not wearing prescribed glasses or having the correct prescription.</td>
<td></td>
</tr>
<tr>
<td><strong>Impaired functional mobility</strong> May include patients who need help with IADLS or ADLS or have gait or transfer problems, arthritis, pain, fear of falling, foot problems, impaired sensation, impaired coordination or improper use of assistive devices.</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental hazards</strong> May include but not limited to, poor illumination, equipment tubing, inappropriate footwear, pets, slippery floors, and loose mats.</td>
<td></td>
</tr>
</tbody>
</table>
### Sample Fall Risk Assessment Tools – OHA Providers

<table>
<thead>
<tr>
<th>FALL RISK ASSESSMENT</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level of Consciousness/Mental Status</strong></td>
<td></td>
</tr>
<tr>
<td>☐ 0 - Alert and oriented ×3</td>
<td>☐ 2 - Disoriented ×3 at all times</td>
</tr>
<tr>
<td>Score</td>
<td></td>
</tr>
<tr>
<td><strong>History of Falls (past 3 months)</strong></td>
<td></td>
</tr>
<tr>
<td>☐ 0 - No falls</td>
<td>☐ 2 - 1 - 2 falls</td>
</tr>
<tr>
<td>Score</td>
<td></td>
</tr>
<tr>
<td><strong>Ambulation/Elimination Status</strong></td>
<td></td>
</tr>
<tr>
<td>☐ 0 - Ambulatory/continent</td>
<td>☐ 2 - Chairbound and requires assist w/toileting</td>
</tr>
<tr>
<td>Score</td>
<td></td>
</tr>
<tr>
<td><strong>Vision Status</strong></td>
<td></td>
</tr>
<tr>
<td>☐ 0 - Adequate (w/ or w/o glasses)</td>
<td>☐ 2 - Poor (w/ or w/o glasses)</td>
</tr>
<tr>
<td>Score</td>
<td></td>
</tr>
<tr>
<td><strong>Timed Up and Go</strong></td>
<td></td>
</tr>
<tr>
<td>Wearing their regular footwear, patient starts with back against the chair, arms resting on the arm rests and walking aid ready. When you say go, they should rise from the armed chair and stand on both feet. On the command GO, have patient walk forward ten feet, turn around, return to starting point, and sit down. (See Tip Text for Detail)</td>
<td></td>
</tr>
<tr>
<td>Seconds to complete</td>
<td></td>
</tr>
<tr>
<td>Score</td>
<td></td>
</tr>
<tr>
<td><strong>Gait and Balance</strong></td>
<td>(Mark all that apply)</td>
</tr>
<tr>
<td>☐ 0 - Normal/safe gait and balance while standing or walking</td>
<td>☐ 1 - Balance problem while standing</td>
</tr>
<tr>
<td>☐ 1 - Balance problem while sitting</td>
<td>☐ 1 - Balance problem while walking</td>
</tr>
<tr>
<td>☐ 1 - Balance problem while moving from sit to stand and/or stand to sit</td>
<td>☐ 1 - Gait deviation observed</td>
</tr>
<tr>
<td>☐ 1 - Requires assistance (person, furniture/walls or device) to stand and/or walk</td>
<td></td>
</tr>
</tbody>
</table>
Sample Fall Risk Assessment Tools – OHA Providers

**Symptoms**
- Asymptomatic
  - Weakness
  - Contracture
  - Fracture
  - Deformity
  - Amputation, Type:
- Falls:

**Moality**
- Independent/safe
- Weight bearing limitations
- Needs assistive device or DME
- Unable to ambulate stairs/steps
- Requires assist for transfer
- Transfers to chair
- Bedbound

**Requires Assistance with ...**
- Ambulation
- Bathing
- Dressing
- Dependent for all ADL/IADL's
- Eating
- Meal preparation
- Grooming
- Laundry
- Housekeeping
- Shopping
- Telephone
- Toileting
- Transportation

**DME**
List all DME in the DME task.

**Comment:**
Sample Fall Risk Assessment Tools – OHA Providers

D. Vision Status

- 0 - Adequate (with or without glasses)
- 2 - Poor (with or without glasses)
- 4 - Legally blind

E. Gait/ Balance:

To assess the gait/balance, have patient stand on both feet without holding onto anything; walk straight forward; walk through a doorway; and make a turn.

- 0 - Gait/ balance normal
- 1 - Balance problem while standing
- 1 - Balance problem while walking
- 1 - Decreased muscular coordination
- 1 - Change in gait pattern when walking through doorway
- 1 - Jerking or unstable when making turns
- 1 - Requires use of assistive device (cane, w/c, furniture..)
2. Proactive Fall Interventions

- Education of patients and caregivers
- Medication review
- Exercise programs* → Energy Conservation
- Vision assessment
- Environmental safety assessment
Cont. 2. Proactive Fall Interventions

- Hourly Rounds (ALF, SNF, RCF)
- Vital Signs – Postural Hypotension
- Capillary Blood Glucose
- 1:1
- Manage incontinence
- PAIN Relief
- Video, Audio-Call Tab, Alarm Tab
Proactive Fall Interventions - OHA providers

**Fall Flow Chart**

Assess Reason for fall

- **BOWEL/BLADDER**
  - Constipation
  - Diarrhea
  - Impaction
  - Incontinence
  - Nocturia
  - Urgency

- **Unsteady gait, Poor balance, weakness**
  - Low Bed
  - Bed Alarm
  - Baby monitor
  - Frequent checks by CG
  - Consider PT/OT eval

- **Infectious Process:**
  - UTI
  - URTI

- **Medication Induced**
  - Review med list with MD & RPH
  - Frequent monitor by CG until symptoms subside

- **Environment**
  - Extreme heat or cold
  - Noise
  - Lighting
  - Trip Hazards

- **Cognitive/MemoryPx Mental Illness**

- **Pain/Agitation**
  - Intervention: MD consult

- **Hypotension**
  - Med review w/ MD
  - Pt/CC teach re to keep BP

- **Interventions:**
  - Foley
  - Commode
  - Depends
  - Disimpaction
  - Toileting
  - Medication for urgency

- **Interventions:**
  - Consult with MD re need for antibiotics, anti-fungal
  - Frequent monitoring by CG until infection subsides
  - Medication to help manage other symptoms

- **Intervention:**
  - Remove clutter,
  - Low hospital bed,
  - Sturdy chair that is easy to get out of,
  - Night light,
  - Transfer bars,
  - Adaptive equipment
  - PT/OT referral

- **Intervention:**
  - Family/Team conference
  - Assess need for placement
  - Frequent checks,
  - Bed/Chair alarm,
  - Instruct pt not to get up by themselves
  - Post sign,
  - Consider sitters
3. Patient and Caregiver Education

- Assessment Fall Risk Score
- Wear Eye Glasses & Shoes
- Environmental Hazards
- Exercise - Stay Active, Energy Conservation
- Medicinal Influence
- Confusion - Cognitive Impairment
- Asking for Help (hospice studies)
Evaluation of Fall Prevention Programs – all falls

- Fall Rates – staff reported incidents
  
  \[(\text{Total # patient falls} / \text{Total # of patient days}) \times 1000 \text{ patient day}\]

- 1000 patient day – Joint Commission’s “bed days of care” (BDOC)

- BDOC – indicates how many days care recipients were occupying beds

- For example: if a unit has a census of 30 for 30 days, this is equivalent to 900 BDOC. If this same unit had 4 falls in the last 30 days, the fall rate would be \[(4/900) \times 1000 = 4.44 \text{ falls per 1000 patient days}\]
Evaluation of Fall Prevention Programs – fall injury

- Fall Injury Rates – staff reported incidents

\[
\frac{\text{Total # patient falls}}{\text{Total # of patient days}} \times 1000 \text{ patient day}
\]

- 1000 patient day – Joint Commission’s “bed days of care” (BDOC)

- BDOC – indicates how many days care recipients were occupying beds

- NOTE: Same formula for FALL INJURY RATE, except Falls without injury not counted
Evaluation of Fall Prevention Programs – Definitions of injury

• None: a fall that results in no injury.

• Minor: a fall-related injury that results in the application of a dressing or ice, cleaning of a wound, limb elevation, or topical medication use.

• Moderate: a fall-related injury that results in suturing, steri-strips/skin glue application, or splinting.

• Major: a fall-related injury that results in surgery, casting, or traction, or requires consultation for neurological or internal injury.

• Death that is determined to result from a fall.
# Fall Rate – OHA Providers

## Provider A

<table>
<thead>
<tr>
<th>Period</th>
<th>Fall Rate per 1000 days</th>
<th>Fall Injury Rate per 1000 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>July-June 2012</td>
<td>6</td>
<td>not tracked</td>
</tr>
<tr>
<td>July-Sept 2012</td>
<td>4.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Oct-Dec 2013</td>
<td>8.6</td>
<td>3.1</td>
</tr>
</tbody>
</table>

## Provider B

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Rate per 1000 days</th>
<th>Fall Injury Rate per 1000 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>3.1</td>
<td>incl to Fall Rate</td>
</tr>
<tr>
<td>2013</td>
<td>2.9</td>
<td>incl to Fall Rate</td>
</tr>
</tbody>
</table>
## Fall Rate – OHA Providers

**Provider C**

<table>
<thead>
<tr>
<th>Year Unknown</th>
<th>Fall Rate per 1000 days</th>
<th>Fall Injury Rate per 1000 days incl to Fall Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start</td>
<td>12.4</td>
<td></td>
</tr>
<tr>
<td>3 months later 1</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>3 months later 2</td>
<td>14.5</td>
<td></td>
</tr>
<tr>
<td>3 months later 3</td>
<td>11.2</td>
<td></td>
</tr>
<tr>
<td>3 months later 4</td>
<td>8.8</td>
<td></td>
</tr>
<tr>
<td>3 months later 5</td>
<td>8.3</td>
<td></td>
</tr>
</tbody>
</table>
# Fall Rate – OHA Providers

## Provider D

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Fall Rate per 1000 days</th>
<th>Fall Injury Rate per 1000 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4 2011</td>
<td>Fall injury only</td>
<td>0.8</td>
</tr>
<tr>
<td>Q1 2012</td>
<td>Fall injury only</td>
<td>0.7</td>
</tr>
<tr>
<td>Q2 2012</td>
<td>Fall injury only</td>
<td>0.7</td>
</tr>
<tr>
<td>Q3 2012</td>
<td>Fall injury only</td>
<td>0.57</td>
</tr>
<tr>
<td>Q4 2012</td>
<td>Fall injury only</td>
<td>0.5</td>
</tr>
<tr>
<td>Q1 2013</td>
<td>Fall injury only</td>
<td>0.95</td>
</tr>
<tr>
<td>Q2 2013</td>
<td>Fall injury only</td>
<td>0.81</td>
</tr>
<tr>
<td>Q3 2013 - on going</td>
<td>Fall injury only</td>
<td>1.4</td>
</tr>
</tbody>
</table>

## Provider E

<table>
<thead>
<tr>
<th>Date</th>
<th>Fall Rate per 1000 days</th>
<th>Fall Injury Rate per 1000 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 2013</td>
<td>8.4</td>
<td>incl to Fall Rate</td>
</tr>
<tr>
<td>June 2013</td>
<td>6.3</td>
<td>incl to Fall Rate</td>
</tr>
</tbody>
</table>
Fall Rate – OHA Providers

- Key Take Away – Get started and record Baseline
References


