#2 – Fill in the Gaps

## Review Findings
- Interview staff and others closely involved (last to see the resident, first responder, witness, resident, visitors, etc.)
- Use open-ended questions (e.g., “Tell me about…?”)
- Make a diagram of the scene at time of discovery, attach it to the investigation (show position of furniture, door/doorways, equipment, other relevant features)
  - Draw a stick figure to indicate where resident fell/was found (label as face-up or face-down)

## #3 – Analyze

### Identify Contributing Factors
- Possible contributing factors to consider:
  - Environment and equipment related
  - Medication related
  - Communication related
  - Were identified fall prevention/risk interventions in place?
  - Care/service plan appropriate, updated, and followed?
- Use the 5-Whys to uncover root causes (see back)

## #4 – Action Plan Development

- Include Interdisciplinary Team (IDT) in process
- Ask, “What can we do to keep similar events from happening again?” (System-level, not just resident-level)
- Address identified root causes
- Develop an action plan with SMARTS

## #5 – Evaluation of Effectiveness

### Test the Plan (PDSA)
- Plan: Formulate action steps
- Do: Implement steps on trial basis
- Study: Monitor effectiveness for set time period
- Act: Review effectiveness, revise or adopt plan

### Implement the Plan & Monitor for Effectiveness
- Track and trend data over time
- Share results with Safety and Quality Committees

### Adverse Event Report (if applicable)
- Complete/send to Oregon Patient Safety Commission within 30 days of discovery (for hospitalization or death)
## Contributing Factors & 5-Whys

### Contributing Factors

*Note: this chart is meant to provide examples of possible contributing factors and is not considered all-inclusive.*

<table>
<thead>
<tr>
<th>Communication</th>
<th>Organizational Factors</th>
<th>Care Management</th>
<th>Resident Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• With physician or RN practitioner</td>
<td>• Overall culture of safety</td>
<td>• Developing a care plan</td>
<td>• Language/culture</td>
</tr>
<tr>
<td>• Hand-offs or shift reports</td>
<td>• Unit staffing levels</td>
<td>• Implementing a care plan</td>
<td>• Family dynamics/relationships</td>
</tr>
<tr>
<td>• Involving resident transfers</td>
<td>• Shift leadership/management</td>
<td>• Following a care plan</td>
<td>• Mental status</td>
</tr>
<tr>
<td>• Available information</td>
<td>• Adequacy of budget</td>
<td>• Updating a care plan</td>
<td>• Behavioral problems</td>
</tr>
<tr>
<td>• Between departments</td>
<td>• Systems to identify risks</td>
<td>• Availability of resources</td>
<td>• Sensory impairment</td>
</tr>
<tr>
<td>• Between healthcare personnel &amp; resident/family</td>
<td>• Internal reporting</td>
<td>• Responding to a change of condition</td>
<td>• Resident assumption of risk</td>
</tr>
<tr>
<td>• With other organizations or outside providers</td>
<td>• Commitment to resident safety</td>
<td>• Resident consent process</td>
<td>• Underlying medical conditions</td>
</tr>
<tr>
<td>• Among healthcare personnel (includes temporary/agency staff)</td>
<td>• Accountability for resident safety</td>
<td></td>
<td>- Pain</td>
</tr>
<tr>
<td>• Hard to read handwriting/fax</td>
<td>• Staffing turnover</td>
<td></td>
<td>- Neuromuscular</td>
</tr>
<tr>
<td></td>
<td>• Temporary staffing and lack of communication</td>
<td></td>
<td>- Orthopedic</td>
</tr>
<tr>
<td></td>
<td>• Staff assignment/work allocation</td>
<td></td>
<td>- Cardiovascular</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Recent condition change</td>
</tr>
<tr>
<td>Equipment, Software, or Material Defects</td>
<td>Policies &amp; Procedures</td>
<td>Training &amp; Supervision</td>
<td>Work Area/Environment</td>
</tr>
<tr>
<td>• Equipment meeting code, specifications, or regulations</td>
<td>• Absent</td>
<td>• Job orientation</td>
<td>• Work area design specifications</td>
</tr>
<tr>
<td>• Defective/non-working equipment</td>
<td>• Too complicated</td>
<td>• Continuing education</td>
<td>• Distractions</td>
</tr>
<tr>
<td>• Software</td>
<td>• Outdated</td>
<td>• Staff supervision</td>
<td>• Interruptions</td>
</tr>
<tr>
<td>• Equipment design (function, displays, or controls)</td>
<td>• Not followed / Not compliant</td>
<td>• Skills demonstration</td>
<td>• Relief/float healthcare staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Availability of training programs</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• In service education/competency training</td>
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</tbody>
</table>

### Using the 5-Whys

#### The 5-Whys

A question-asking method used to uncover the underlying cause of an event (see example to right). Uncovering the root causes(s) leads to action plans that are more likely to prevent the event from happening again.

---

**Resident fell in room**

1. **WHY**
2. She tripped over a chair
3. **WHY**
4. She didn’t see the chair
5. **WHY**
6. The room was dark (no nightlight)
7. **WHY**
8. Nightlight not part of plan of care
9. **WHY**
10. Resident assessed as NOT at risk for falling

**Plan: Remove or move the chair**

**Plan: Put nightlights in all the rooms**

**Plan: Review fall risk assessment process; update if needed**

---

Developed by the Oregon Patient Safety Commission’s Nursing Home Expert Panel
Review Contributing Factors Related to Environment and Equipment

Environment

General Contributing Factors
- Lighting
- Flooring (wet, shiny, contrast, uneven)
- Equipment placement
- Furniture placement
- Room to move freely in the space/turn radius
- Others present (residents, staff, visitors, etc.)

Contributing Factors That Impact How a Resident Interacts with Their Environment
(Keep general contributing factors in mind for each)
- Footwear/clothing
- Mobility
- Prosthesis/splint
- Dominant side re: equipment, furniture, doors and doorways, bathroom fixtures
- Sensory impairments (eyesight, hearing)
- Cognition
- Resident assumption of risk
- Behavioral problems/issues
- Underlying medical conditions:
  - Pain
  - Neuromuscular
  - Orthopedic
  - Cardiovascular
  - Recent condition change
  - Dialysis
  - Neurological

If Immediate Risk Identified, Take Steps to Ensure Resident Safety and Prevent Recurrence
- Remove, replace, and/or repair hazard or equipment

Environment & Equipment Drill-Down

Equipment

General Contributing Factors
- Defective/nonworking equipment (in good repair?)
- Equipment design (function, displays, controls, etc.)
- Use specified in care/service plan (and up-to-date)
- Appropriate for resident?
- Proper placement (re: dominant side, within reach, etc.)
- Equipment meeting code, regulations
- Entrapment/safety risk

Specific Equipment Related Contributing Factors
(Keep general contributing factors in mind for each)

Bed
- Height/position
- Brakes on/off
- Mattress (type)

Side-rails
- Full/half/other
- Transfer cane
- Padding

Fall mat
- Thickness

Bathroom equipment
- Toilet seat raise
- Grab bars
- Toilet height
- Commode present
- Toileting schedule

Call light
- See general contributing factors

Alarms
- On/attached to resident?
- Turned on?
- Functioning/working?
- Sounding?
- When was it placed?

Assistive devices and transfer equipment
- In need of repair (exposed metal, torn vinyl, etc.)
- Are brakes on/off?
- Are footrests up/down/off?
- Is wheelchair cushion present/with or without nonskid material?
- Is resident positioned appropriately?
- Is device adjusted/fitted properly? (e.g., seat height/depth, foot placement)

Return to Falls Investigation Guide
(#3 – Analysis: Identify Contributing Factors)
Equipment Resource List

Note: this list is meant to provide examples of equipment used to meet resident needs and is not considered all-inclusive.

Restraints & Supportive Devices

- Bed cane
- Geri-Chair/recliner/Tilt-N-Space wheelchair
- Lap Buddy/Flexi-Lock
- Lap tray
- Tray table
- Seatbelt
- Wheelchair straps
- Anti-rollback wheelchair device
- Anti-tip wheelchair device
- Leg straps
- Wrist restraints/mitts
- Chest harness/pelvic restraint
- Therapy trough
- Side rails (quarter, half, three-quarters, full)
- Any other device attached to or adjacent to the resident’s body that the resident cannot remove and that restricts his or her freedom of movement or access to the body

Mobility Devices & Transfer Equipment

- Cane
- Walker
- Merry Walker
- Wheelchair
- Lift equipment (Hoyer and other)
- Slide board
- Transfer bar (M-rails, grab bars, etc.)
- Transfer pole

Alarms

- Bed
- Tab
- Pressure pad
- Seatbelt
- Motion sensors
- Wheelchair
- Call light

Other

- Beds in low position
- Perimeter mattress
- Contour mattress
- Fall mat
- Pool bed

Developed by the Oregon Patient Safety Commission’s Nursing Home Expert Panel
Review Contributing Factors Related to Medication

Medication

General Contributing Factors
- New medications?
- Changes? (i.e., dose, time, etc.)
- When was last dose given?
- Has there been a med error in the last 24 hours?

Other Medication Related Contributing Factors to Consider

Side Effects
Did resident exhibit signs of or complain of:
- Weakness?
- Acute delirium?
- Dizziness?
- Clammy skin?
- Gait disturbance?
- Dehydration?
- Impaired vision?
- Agitation?
- Impulsiveness?
- Resistance to care?

Interactions
Review for:
- Drug-drug
- Drug-food
- Drug-supplement
- Drug-herb

Medication Class

Diuretics
- Edema (lower extremity)
- Lung status (CHF)
- Change in urgency & void
- Change in usual voiding pattern
- Change in fluid intake (72 hours)

Laxatives
- Prescribed &given?

Psychopharmacological (anti-anxiety, antidepressant, antipsychotic, hypnotic)
For antipsychotics only:
- Check most recent AIMS
- Consider EPS (involuntary movement)

Anti-Hypertensives/Cardiovascular
- Baseline blood pressure
- Postural blood pressure
- Vital signs (include O₂ sats)
- Skin (is it cold/clammy?)

Narcotics/Analgesics
- Pain level
- At last dose
- At time of fall

Antibiotics
- Diagnosis for use (UTI, Pneumonia)

Consult Pharmacist & Physician (as appropriate)

If Immediate Risk Identified, Take Steps to Ensure Resident Safety and Prevent Recurrence

Return to Falls Investigation Guide (#3 – Analysis: Identify Contributing Factors)
Review Contributing Factors Related to Communication

Communication

Points of Communication Exchange to Consider
- Handoffs or shift reports
- Between departments
- With physician or nurse practitioner
- Between healthcare personnel & resident/family
- Involving resident transfers
- Among staff
- With other organization or outside providers
- Care communication tools (i.e., care/service plan, documentation, 24-hour report, alert charting, etc.)

Other Communication Related Contributing Factors to Consider

General Contributing Factors
- Lack of information provided and/or available (verbal and documented)
- Language barriers
- Hard to read handwriting/fax
- Forms difficult to use
- Communication not adequate (accurate, complete, and understood)

Environmental/Work Area Contributing Factors
- Distractions and interruptions
- Work area design
- Work allocation/work load
- Stress levels

Organizational Contributing Factors
- Information regarding resident status and care needs was not shared and used in a timely manner
- The resident and/or family was not actively included in the care/service planning process
- The overall culture of the facility does not encourage or welcome observations, suggestions, or "early warnings" from staff about risky situations and risk reduction

Resident related Contributing Factors
- Language/culture
- Sensory impairment
- Family dynamics/relationships
- Cognition
- Resident assumption of risk
- Behavioral problems/issues
- Underlying medical conditions:
  - Pain
  - Neuromuscular
  - Orthopedic
  - Cardiovascular
  - Recent condition change
  - Dialysis
  - Neurological

If Immediate Risk Identified, Take Steps to Ensure Resident Safety and Prevent Recurrence

Return to Falls Investigation Guide (#3 – Analysis: Identify Contributing Factors)
### SBAR Communication Worksheet

#### PREP

<table>
<thead>
<tr>
<th>Have the following available before calling the Physician, Nurse Practitioner, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Your assessment of the resident</td>
</tr>
<tr>
<td>- Resident’s chart including most recent progress notes &amp; notes from previous shift</td>
</tr>
<tr>
<td>- List of current medications, allergies, labs (provide date &amp; time of test(s) done &amp; results of previous test(s) for comparison)</td>
</tr>
<tr>
<td>- Most recent vital signs</td>
</tr>
<tr>
<td>- Code status</td>
</tr>
</tbody>
</table>

Use the following modalities to contact the Physician, N.P., etc.:

- Direct page
- Call/answering service
- Office (during weekdays)
- Home or cell phone

Before assuming that the Physician, N.P., etc., is not responding, utilize all modalities. Use appropriate protocol as needed to ensure safe resident care.

#### Situation

I am calling about  <resident name, facility, unit>

The problem I am calling about is  <fall, med error, code, etc.>

Vital signs are: Blood pressure ___/___; Pulse: ___; Respiration: ___; Temp: ___

I have just assessed the resident personally and am concerned about the

- Blood pressure, pulse, respiration and/or temp, because it is not within normal limits
- Other  <state your concern>

#### Background

The resident’s current mental status is  <confused, agitated, combative, lethargic, etc.>

- This is different than baseline  <state how>

The skin is  <pale, mottled, diaphoretic, extremities cold or warm, etc.>

- This is different than baseline  <state how>

The resident is on oxygen.

- The resident has been on ___(l/min) or (%) oxygen for ____(min or hr)
- The oximeter is reading ___%
- The oximeter does not detect a good pulse & is giving erratic readings.
- This is different than baseline  <state how>

The resident’s current medications include  <state current, relevant medications>

The resident’s current treatments include  <state current, relevant treatments>

#### Assessment

This is what I think the problem is  <say what you think the problem is>

The problem seems to be  <cardiac, infection, neurologic, respiratory, etc.>

I am not sure what the problem is, but the resident is deteriorating.

The resident seems to be unstable & may get worse; we need to do something.

#### Recommendation

I suggest or request that you  <state what you want or would like to see done>

- Come see the resident or schedule an appointment
- Order a consult, medication, treatment, etc.
- Transfer the resident to the ED
- Talk to the resident and/or representative about the code status

If a change in medication or treatment is ordered, then ask:

- When do you want to start the new order?
- Do you want to discontinue other medications or treatments?
- How often do you want vital signs?
- How long do you expect this problem to last?
- If the resident does not get better, when do you want us to call again?

Document the change in the resident’s condition and physician notification.