



The Nursing Home Expert Panel's

Falls Investigation Guide Toolkit: How-To Guide

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The Nursing Home Expert Panel's

Falls Investigation Guide Toolkit: How-To Guide

Introduction

Oregon's Quality Agenda

In February, 2008 the Oregon Patient Safety Commission (OPSC) convened its Nursing Home Expert Panel to encourage quality improvement in nursing homes. The stated goal was to “better align nursing home patient safety efforts around a well-articulated and interlocking set of principles, values and assumptions.” The project started with a straightforward question: Could the expert panel identify critical safety concerns and then offer a standardized set of improvement tools? Since then, the work has gathered momentum and is now part of a larger effort to re-think quality efforts within long-term care. The cornerstones of this new approach are:

- Responsive regulation (an approach that encourages nursing homes to design their own safe systems, while regulating those systems to ensure that practices are actually applied. Please see [OPSC's website](#) for additional information).
- Alignment of interests (the belief that improvement requires everyone, including nursing homes, regulators, consumers and family, and purchasers to have a aligned goals in a quality agenda)
- Standardized quality improvement tools and techniques (we need to create well-tested, evidence-based approaches).

The expert panel has led the effort to develop standardized tools.

The Project — Falls Management

With a focus on safety and cooperative quality improvement, the Expert Panel set out to address trends identified through the Oregon Patient Safety Commission's adverse event reporting program as well as common citations in Oregon's long term care environments. The Expert Panel chose to work on falls management; specifically, reducing falls with injury and repeat falls.

Upon review of falls data, survey citation data, and incident reports, the Expert Panel concluded that nursing homes and community based care settings would benefit from improved systems for falls investigation. This led to the development of a simple, easy to use, set of [guides](#) to investigate falls built around evidence-based quality improvement principles. The Panel focused on the three most common contributing factors to falls – medications, environment/equipment, and communication – and developed investigation guides to address each one as well as an overarching falls investigation guide. The guides take the first responder through an initial investigation and continue on to direct follow-up and review per facility policy. Based on feedback from pilot participants, a condensed version of the investigation guides was also created to guide a fall's first responder through the initial investigation process. Additionally, a [documentation checklist](#) and a [falls investigation form](#) were created to further aid facilities in the investigation process. Using these tools, two pilot participants developed their own falls investigation forms which have been included in this toolkit. It is the Panel's hope that other facilities will incorporate the information provided into their systems as well and make it their own.

Nursing Home Expert Panel Members

Special thanks to all the Nursing Home Expert Panel members for their hard work and dedication to this project. Their participation was voluntary and reflects their commitment to improving the quality and safety of long term care in Oregon. Members included:

- Libby Darnall, RN, Seniors & People with Disabilities
- Sharon Faulk, RN, Pinnacle Healthcare
- Patti Garibaldi, RN, BA, RAC-CT, Consonus Healthcare
- Amy Carl, Oregon Patient Safety Commission
- Ruth Gulyas, Oregon Alliance of Senior & Health Services
- Demi Haffenreffer, RN, MBA, Haffenreffer & Associates
- Linda Kirschbaum, Oregon Health Care Association
- Valerie Van Buren, MPH, Acumentra Health and Oregon Patient Safety Commission

Additional thanks to Karen Jones, Acumentra Health, for her work on formatting the Investigation Guides.

What Providers Have to Say about the Investigation Guides

“Without the written Falls Investigation Guide, it is easy for the nurses to forget about some factors that could contribute to a fall or to skip over steps in the investigation process. The 5-Whys have also forced us to dig deeper into the root causes of each fall and allowed us to implement systems to prevent similar falls in the future. Since we started using the Guide, we have seen a steady decline in our falls rates, and we hope that over time as we get better and better at using it, we will continue to see fewer falls and fewer injuries!”

Erin Cornell
Director of Health Services
Rose Villa

“Using the Falls Investigation Guide helped my staff feel more empowered. They were active participants in the investigation; we used the valuable suggestions from front-line staff to make care plan interventions. It helped us be proactive about trying to keep another fall from happening again...to the same resident and other residents.”

Leslie Pena, LPN
Administrator
Mount Angel Towers

“Quality is everyone’s responsibility.”

W. Edwards Deming

Components of an Effective Investigation Process

Applying Root Cause Analysis to Falls Investigations

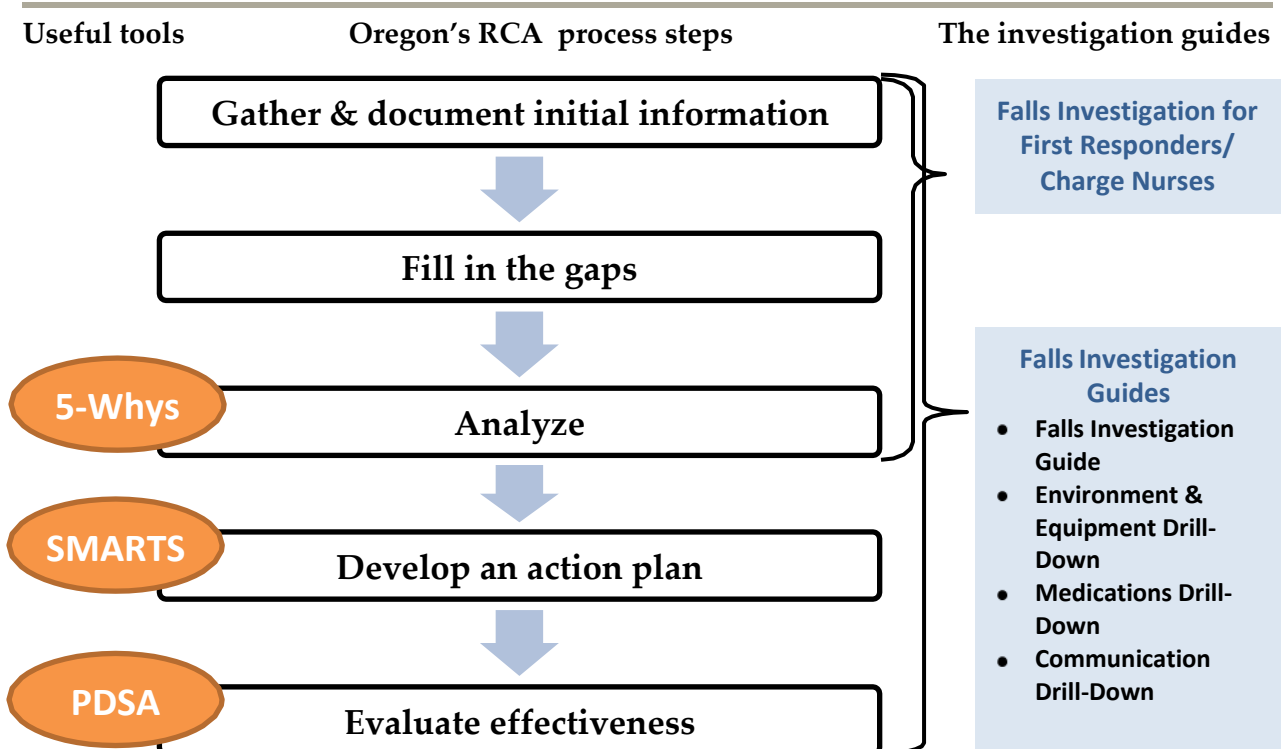
To understand why falls or other adverse events occur, improvement experts champion the use of root cause analysis (RCA). RCA requires a systematic, intensive, and in-depth review to learn the most basic reasons for the adverse event. The approach has a formal logic and a defined methodology. The goal is to understand the problem in sufficient depth to effectively eliminate the risk of future injury. RCA can be used to analyze a single fall as well as to look at multiple falls so that patterns can be identified and system wide changes can be made. For more information on RCA, please refer to *Oregon’s Guide to Root Cause Analysis in Long Term Care, Investigating with a Different Lens*. (Available at: <http://library.state.or.us/repository/2010/201009130912581/index.pdf>). The Falls Investigation Guides walk the investigator(s) through the RCA process in order to:

- Determine what happened.
- Identify factors that contributed to the event (i.e., the fall(s)).
- Develop an action plan to reduce the likelihood of a similar event.

The components of an effective RCA outlined in *Oregon’s Guide to Root Cause Analysis* are:

1. Gather and document initial information
2. Fill in the gaps
3. Analyze
4. Develop an action plan
5. Implement action plan and evaluate results

The diagram below summarizes how the Falls Investigation Guides correspond to the steps in an RCA. Additional quality improvement tools to assist you in your investigation are noted to the left. Information about these tools can be found within the [Falls Investigation Guides](#) and in the [Glossary of Terms](#).



How Does Your Investigation Measure Up?

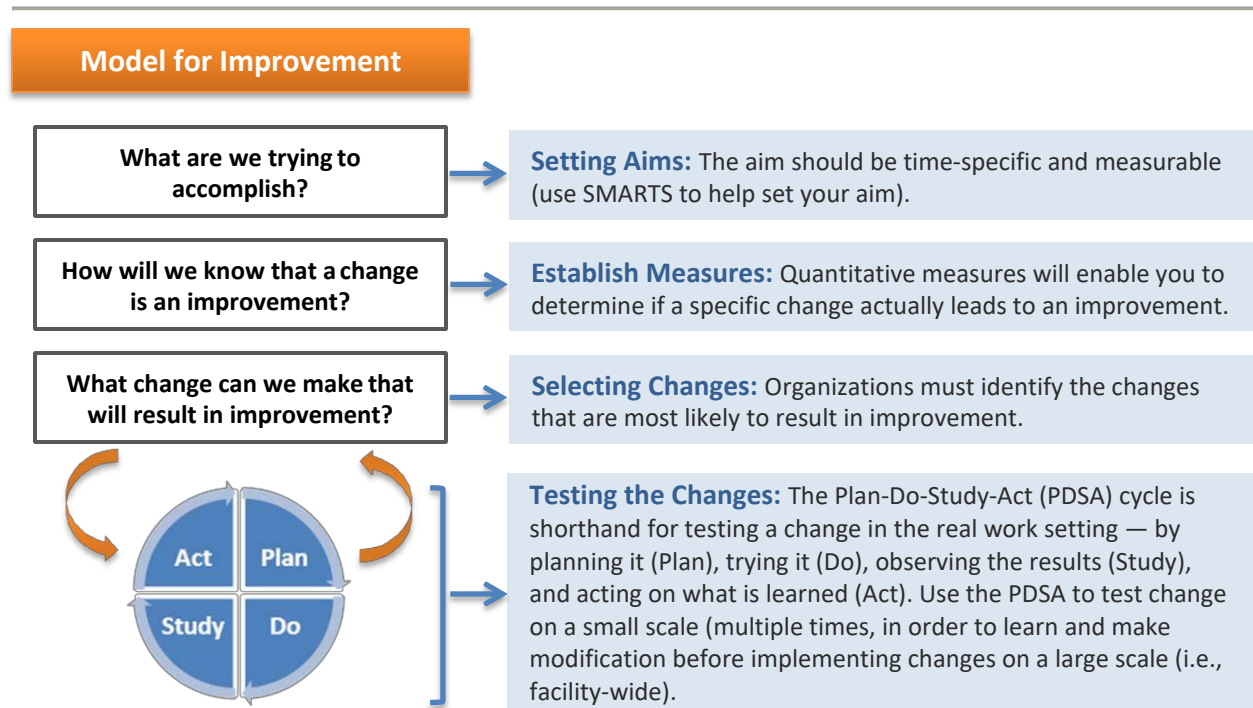
You can compare your facility's current practices related to falls investigations with those outlined in the Falls Investigation Guides using the *Falls Investigation Guide Documentation Checklist* located in [Appendix A](#). Note that this document is not meant to replace the guides, which contain much more detail and process information. It is, however, a tool to help you identify any gaps you may currently have in your processes.

Implementing Change and Sustaining Improvement

Once a facility has decided to make a change in how it investigates falls, it is important to plan the change in order to ensure effective implementation. One tool that can help structure this process is the Model for Improvement; a simple tool for accelerating improvement. It is not meant to replace change models that organizations may already be using, but rather to accelerate improvement. This model has been used very successfully by hundreds of health care organizations to improve many different health care processes and outcomes.

The Model for Improvement has two parts:

1. Three fundamental questions (can be answered in any order)
2. The Plan-Do-Study-Act (PDSA) cycle to test and implement change. The PDSA cycle helps guide the test to determine if the change is an improvement.



For more information on the Model for Improvement visit the Institute for Healthcare Improvement at: ihi.org.

After testing your change on a small scale, learning from each test, and modifying the change through several PDSA cycles, you can implement the change on a broader scale. Once implemented, it is important to make sure your change continues to have the intended impact (i.e., are you still meeting your aim?). Monitor your progress by tracking your measure. You may find that you need to modify your approach over time using the PDSA cycle. It is also possible for your aim to change, in which case you can begin the Model for Improvement again by asking the three fundamental questions. See [How to Integrate the Falls Guides into the Investigation Process](#) for an outline of what this might look like in your facility.

The Falls Investigation Guides

The Falls Investigation Guides are a series of guides that walk the investigator(s) through a fall investigation. The Falls Investigation Guide and the three Drill-Downs are intended to be used together and offer detailed information related to different components of the investigation process (see description of each guide below). The Falls Investigation Guide for First Responders is a condensed version of the other guides which includes only the initial steps in the investigation. The Guides are located in the next 10 pages of this How-to Guide and are intended to be printed front to back; ordering is as follows:

Falls Investigation Guide

This guide, which follows the RCA process, serves as a roadmap for the investigation indicating the sequence of events post-fall, through action plan development and monitoring for effectiveness. During the “Analyze” portion of the investigation, the guide refers the investigator(s) to three “Drill-Down” guides to assist with identification of contributing factors related to the following areas:

- Environment and equipment
- Medications
- Communication

(2 pages, back: Contributing Factors and 5-Whys)

Environment and Equipment Drill-Down

This guide walks the investigator(s) through potential contributing factors related to the environment and equipment. It is referenced in the Falls Investigation Guide as follows:

**See Environment &
Equipment Drill-Down**

(2 pages, back: Equipment Resource List)

Medications Drill-Down

This guide walks the investigator(s) through potential contributing factors related to medication use (i.e., medication review, possible drug side-effects, possible interactions, etc.). It is referenced in the Falls Investigation Guide as follows:

**See Medication
Drill-Down**

(2 pages, back: blank)

Communication Drill-Down

This guide walks the investigator through potential contributing factors related to the communication. It is referenced in the Falls Investigation Summary Guide as follows:

**See Communication
Drill-Down**

(2 pages, back: SBAR Communication Worksheet)

Falls Investigation Guide for First Responders

This is a condensed version of the guides, which walks a first responder through the initial steps of the investigation process. The intent is that the investigation will be handed off to another individual, based on facility structure and policy, who will follow the investigation through completion.

(2 pages, back: contributing factor “Drill-Downs” summary to review factors related to environment and equipment, medications, and communication)

Fall Occurs

Fall Protocol Components (per facility policy)

Immediately Ensure Resident is Safe, Assess and Treat for Injury

- Put any preliminary preventative steps into place

Make Required Notifications

- Nurse or CBC Health Services
- 911 (if applicable)
 - Physician (use SBAR)
 - Admin & DNS (or leadership team)
 - Resident's responsible party
- Admin or DNS
- Notify Adult Protective Services if abuse/neglect suspected

Investigation Components (Root Cause Analysis)

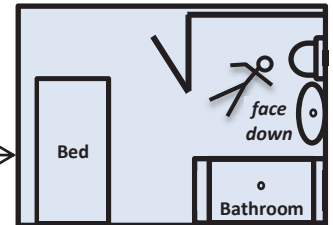
Begin Investigation

Situation Background Assessment Recommendation (See back of Communication Drill-Down)

#1 – Gather & Document Initial Information

- Document Event**
- Update care communication tools
 - Alert charting
 - 24-hr. report
 - Temporary care/service plan
 - New physician order (note & implement)
 - Begin incident report (or other facility document)

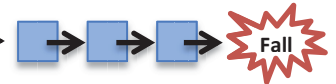
- Interview staff and others closely involved (last to see the resident, first responder, witness, resident, visitors, etc.)
- What do they think happened (sequence of events) and why (contributing factors)
- Use open-ended questions (e.g. "Tell me about...")
- Make a diagram of the scene at time of 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)



#2 – Fill in the Gaps

Review Findings

- Identify gaps and gather any missing information (i.e., review record, fall history, interview/re-interviews, plan of care, etc.)
- Outline the sequence of events leading up to the fall
- List possible contributing factors



#3 – Analyze

Document Analysis Findings

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)

See Environment & Equipment Drill-Down

See Medication Drill-Down

See Communication Drill-Down

#4 – Action Plan Development

- Considerations for Action Plan**
- Include resident and/or responsible party
 - Review risks/benefits
 - Ask for alternative ideas to prevent recurrence
 - Review proposed changes to care/service plan
 - Consider:
 - Resident's needs, goals, and preferences
 - Effectiveness of previous plans
 - Managed risk agreement
 - Supervision plan
 - Review:
 - Regulations and best practices
 - Policies and procedures
 - Care/service plan

- 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

Specific Measurable Attainable Realistic Timely Supported

#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

Document Action Plan & Results

- Update care communication tools
 - Care/service plan (or document reasons for no change)

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

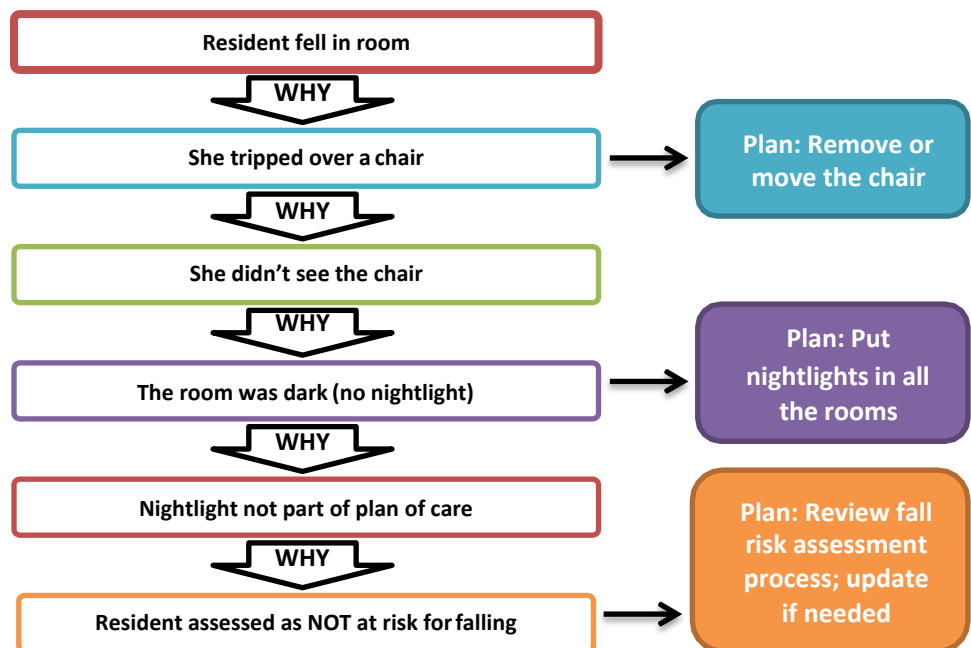
Note: this chart is meant to provide examples of possible contributing factors and is not considered all-inclusive.

Communication	Organizational Factors	Care Management	Resident Factors
<ul style="list-style-type: none"> With physician or RN practitioner Hand-offs or shift reports Involving resident transfers Available information Between departments Between healthcare personnel & resident/family With other organizations or outside providers Among healthcare personnel (includes temporary/agency staff) Hard to read handwriting/fax 	<ul style="list-style-type: none"> Overall culture of safety Unit staffing levels Shift leadership/management Adequacy of budget Systems to identify risks Internal reporting Commitment to resident safety Accountability for resident safety Staffing turnover Temporary staffing and lack of communication Staff assignment/work allocation 	<ul style="list-style-type: none"> Developing a care plan Implementing a care plan Following a care plan Updating a care plan Availability of resources Responding to a change of condition Resident consent process 	<ul style="list-style-type: none"> Language/culture Family dynamics/relationships Mental status Behavioral problems Sensory impairment Resident assumption of risk Underlying medical conditions <ul style="list-style-type: none"> Pain Neuromuscular Orthopedic Cardiovascular Recent condition change Dialysis Neurological
Equipment, Software, or Material Defects	Policies & Procedures	Training & Supervision	Work Area/Environment
<ul style="list-style-type: none"> Equipment meeting code, specifications, or regulations Defective/non-working equipment Software Equipment design (function, displays, or controls) 	<ul style="list-style-type: none"> Absent Too complicated Outdated Not followed / Not compliant 	<ul style="list-style-type: none"> Job orientation Continuing education Staff supervision Skills demonstration Availability of training programs In service education/competency training 	<ul style="list-style-type: none"> Work area design specifications Distractions Interruptions Relief/float healthcare staff

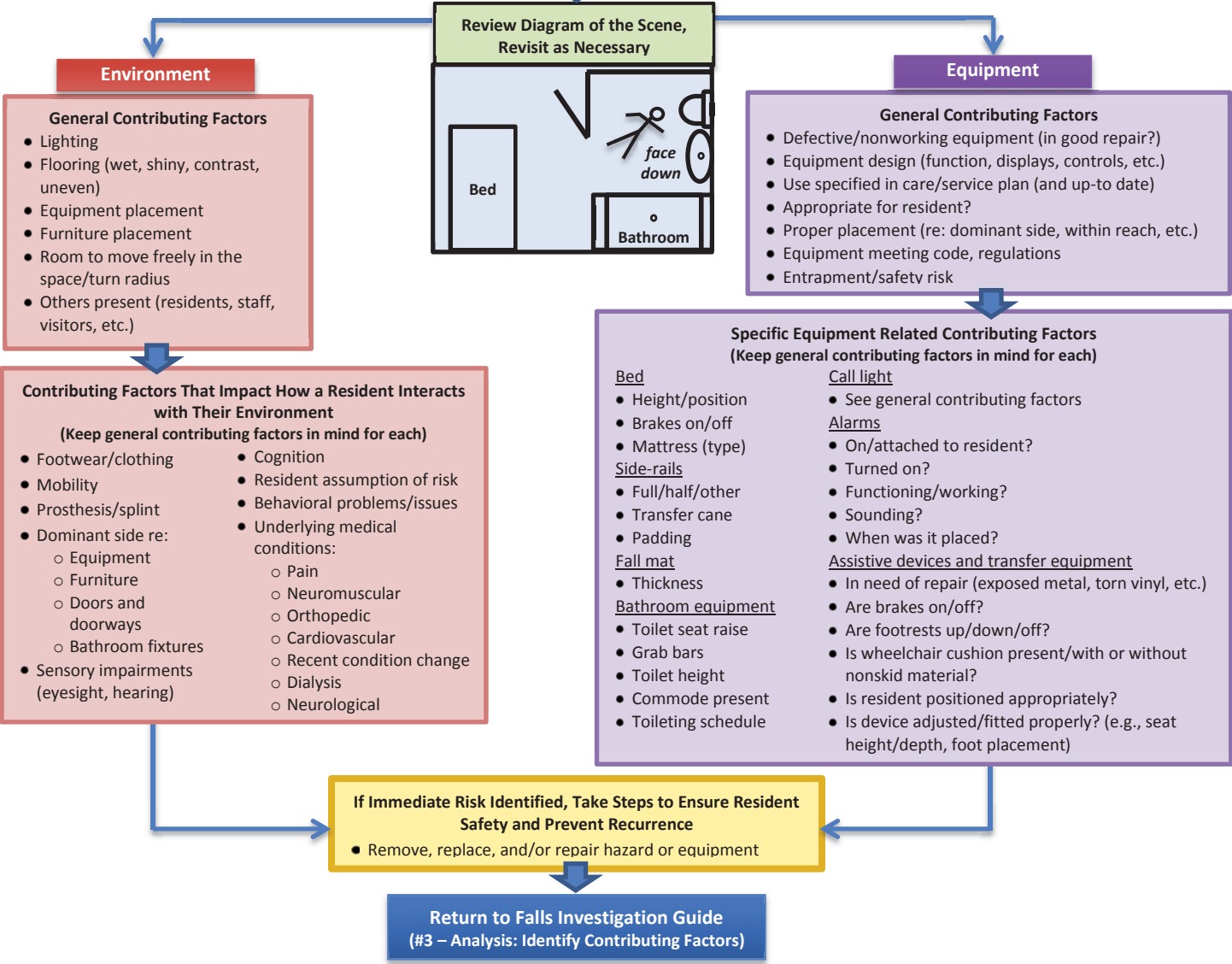
Using the 5-Whys

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.



Review Contributing Factors Related to Environment and Equipment



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

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

Hypo/Hyperglycemics

Time of last insulin/oral agent dose
CBG results
Last p.o. intake (time, quantity)
Skin (is it cold/clammy?)

Antibiotics

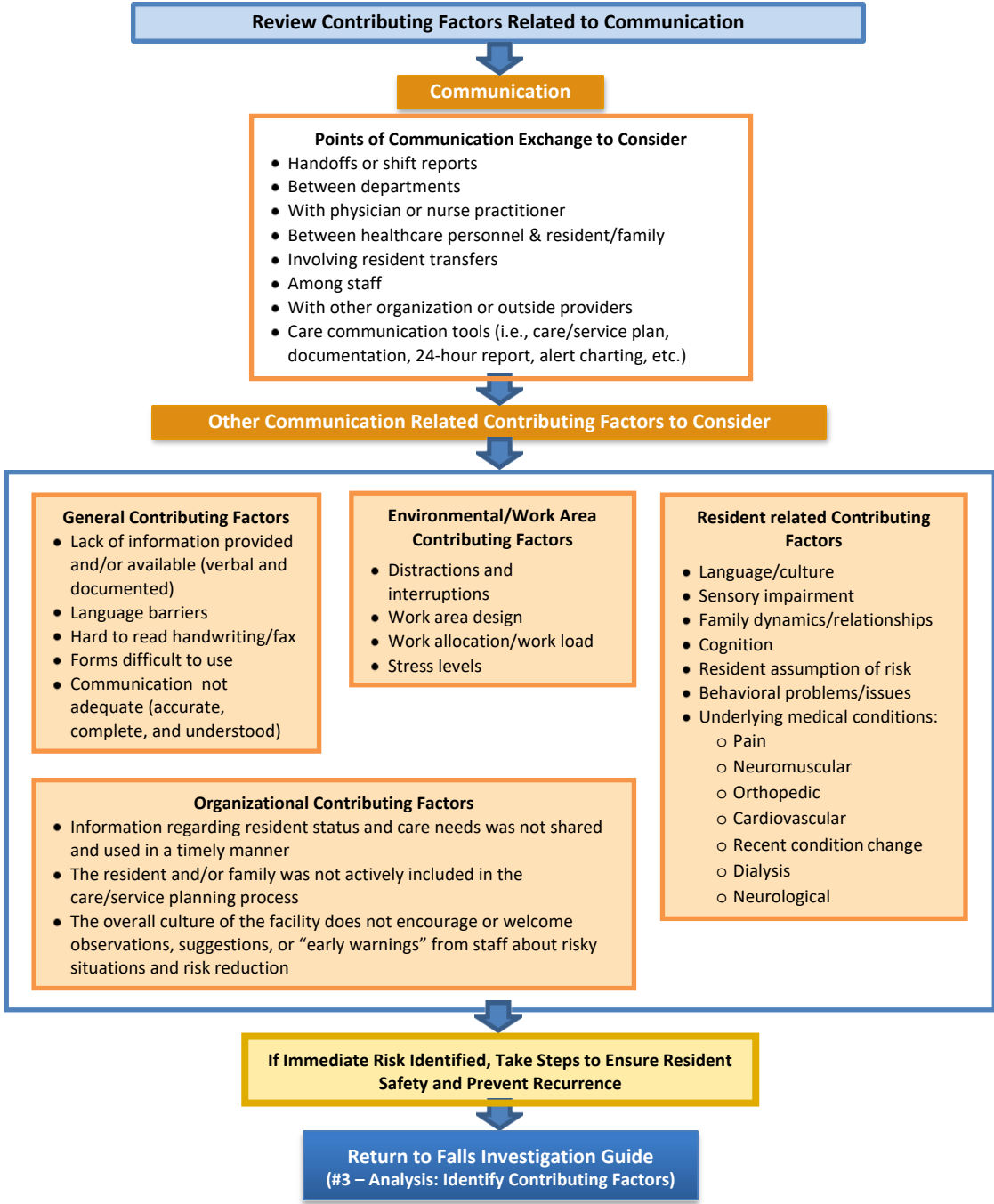
Diagnosis for use (UTI, Pneumonia)

**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)**

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SBAR Communication Worksheet

PREP	<p>Have the following available before calling the Physician, Nurse Practitioner, etc.</p> <ul style="list-style-type: none"> • Your assessment of the resident • Resident’s chart including most recent progress notes & notes from previous shift • List of current medications, allergies, labs (provide date & time of test(s) done & results of previous test(s) for comparison) • Most recent vital signs • Code status <p>Use the following modalities to contact the Physician, N.P., etc.:</p> <ul style="list-style-type: none"> • Direct page • Call/answering service • Office (during weekdays) • Home or cell phone <p>Before assuming that the Physician, N.P., etc., is not responding, utilize all modalities. Use appropriate protocol as needed to ensure safe resident care.</p>
S	<p><u>Situation</u></p> <p>I am calling about <resident name, facility, unit></p> <p>The problem I am calling about is <fall, med error, code, etc.></p> <p>Vital signs are: Blood pressure ___/___; Pulse:___; Respiration:___; Temp:___</p> <p>I have just assessed the resident personally and am concerned about the</p> <ul style="list-style-type: none"> • Blood pressure, pulse, respiration and/or temp, because it is not within normal limits • Other <state your concern>
B	<p><u>Background</u></p> <p>The resident’s current mental status is <confused, agitated, combative, lethargic, etc.></p> <ul style="list-style-type: none"> • This is different than baseline <state how> <p>The skin is <pale, mottled, diaphoretic, extremities cold or warm, etc.></p> <ul style="list-style-type: none"> • This is different than baseline <state how> <p>The resident is on oxygen. _____</p> <ul style="list-style-type: none"> • 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> <p>The resident’s current medications include <state current, relevant medications></p> <p>The resident’s current treatments include <state current, relevant treatments></p>
A	<p><u>Assessment</u></p> <p>This is what I think the problem is <say what you think the problem is></p> <p>The problem seems to be <cardiac, infection, neurologic, respiratory, etc.></p> <p>I am not sure what the problem is, but the resident is deteriorating.</p> <p>The resident seems to be unstable & may get worse; we need to do something.</p>
R	<p><u>Recommendation</u></p> <p>I suggest or request that you <state what you want or would like to see done></p> <ul style="list-style-type: none"> • Transfer the resident to the ED • Come see the resident or schedule an appointment • Order a consult, medication, treatment, etc. • Talk to the resident and/or representative about the code status <p>If a change in medication or treatment is ordered, then ask:</p> <ul style="list-style-type: none"> • 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? <p>Document the change in the resident’s condition and physician notification.</p>

Falls Investigation Guide For First Responders

Fall Occurs

Fall Protocol Components (per facility policy)

Immediately Ensure Resident is Safe, Assess and Treat for Injury

- Put any preliminary preventative steps into place

Make Required Notifications
Nurse or CBC Health Services

- 911 (if applicable)
- Physician (use **SBAR**)
- Admin & DNS (or leadership team)
- Resident's responsible party
- Admin or DNS
- Notify Adult Protective Services if abuse/neglect suspected

Investigation Components (Root Cause Analysis)

Begin Investigation

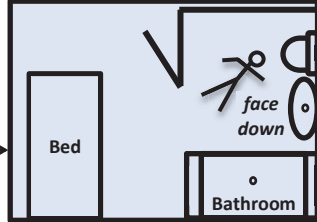
Situation Background Assessment Recommendation
(See back of Communication Drill-Down)

#1 – Gather & Document Initial Information

Document Event

- Update care communication tools
 - Alert charting
 - 24-hr. report
 - Temporary care/service plan
- New physician order (note & implement)
- Begin incident report (or other facility document)

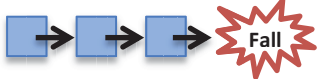
- Interview staff and others closely involved (last to see the resident, first responder, witness, resident, visitors, etc.)
- What do they think happened (sequence of events) and why (contributing factors)
- Use open-ended questions (e.g. "Tell me about...")
- Make a diagram of the scene at time of 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)



#2 – Fill in the Gaps

Review Findings

- Identify gaps and gather any missing information (i.e., review record, fall history, interview/re-interviews, plan of care, etc.)
- Outline the sequence of events leading up to the fall
- List all possible contributing factors



#3 – Analyze

Document Analysis Findings

Identify Contributing Factors

- 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 below)

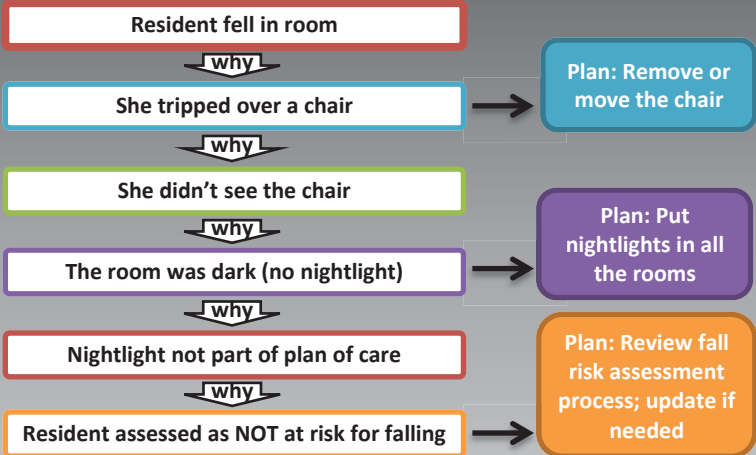
- See Environment & Equipment Drill-Down
- See Medication Drill-Down
- See Communication Drill-Down

Handoff Investigation (per facility policy)
Give to the individual who will review the initial investigation and:

- Develop an action plan to prevent recurrence
- Monitor the effectiveness of the plan

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.



**Use the Drill-Downs to Review Contributing Factors Related to:
Environment & Equipment, Medications, and Communication**

START

Equipment

Environment & Equipment Drill-Down

**Review Diagram of the Scene,
Revisit as Necessary**

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.)

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

**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

**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)

Medication Drill-Down

START

Note: A more thorough review of medications to be completed by nurse manager (to include interactions and medication class)

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 hrs.?

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?

Consult Pharmacist & Physician (as appropriate)

Communication Drill-Down

START

Points of Communication Exchange to Consider

- Handoffs or shift reports
- Between departments
- With physician or NP
- Between staff & resident/family
- Involving resident transfers
- Among staff
- With other providers
- Care communication tools (i.e., care/service plan, 24-hour report, alert charting, etc.)

General Contributing Factors

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

Environmental/Work Area Contributing Factors

- Distractions and interruptions
- Work area design
- Work allocation/work load
- Stress levels

Resident related Contributing Factors

- Language/culture
- Sensory impairment
- Family dynamics
- Cognition
- Resident assumption of risk
- Behavioral 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 For First Responders (#3 – Analysis: Identify Contributing Factors)

Appendix A: Falls Investigation Guide Documentation Checklist

The checklist below identifies the recommended components of a falls investigation as outlined in the Falls Investigation Guides and *Oregon’s Root Cause Analysis (RCA)* process. Review your current process and indicate which of the “Recommended Investigation Components” are a part of your system with a “✓” in the box to the right.

<p>Pre- Investigation</p> <p>↓</p> <p>Gather & document initial information</p> <p>↓</p> <p>Fill in the gaps</p> <p>↓</p> <p>Analyze</p> <p>↓</p> <p>Develop an action plan</p> <p>↓</p> <p>Implement action plan and evaluate results (ongoing)</p>	Recommended Investigation Components (✓ if present)	
	Immediate plan to protect the resident & ensure safety	<input type="checkbox"/>
	Notifications	
	• The physician (using SBAR) and/or 911 (who, time)	<input type="checkbox"/>
	• Resident’s responsible party (who, time)	<input type="checkbox"/>
	• If applicable (i.e., abuse/neglect suspected), appropriate state agencies (i.e., Adult Protective Services or other)	<input type="checkbox"/>
	Interviews to determine what happened (sequence of events) and why it happened	
	• With staff and others closely involved (include last to see the resident, first responder, witnesses, family, etc.)	<input type="checkbox"/>
	• With the resident	<input type="checkbox"/>
	A drawing/diagram of the scene at the time of discovery	<input type="checkbox"/>
	Documentation of initial findings	
	• Determination whether or not the care/service plan was followed	<input type="checkbox"/>
	• Updates to care communication tools (i.e., Alert charting, 24-hr. report, Temporary care/service plan, etc.)	<input type="checkbox"/>
	• Begin incident report (or other facility documentation), to be completed per facility protocol	<input type="checkbox"/>
	Review of initial findings by the Interdisciplinary Team (IDT) to fill in any gaps (i.e., sequence of events leading up to the fall, possible contributing factors, etc.)	<input type="checkbox"/>
	Analyze to identify contributing factors	
	• Environmental/equipment related contributing factors (i.e., resident factors that impact how they interact with environment, equipment: functional appropriate, and, care planned, etc.)	<input type="checkbox"/>
	• Medication related contributing factors (i.e., current medications and administration, side-effects, interactions, issues associated with medication class)	<input type="checkbox"/>
	• Communication related contributing factors (i.e., consider all possible points of communication exchange, organizational factors, environmental factors, resident related factors, etc.)	<input type="checkbox"/>
	• Evaluation to determine if identified fall prevention/risk intervention in place (consider appropriateness for resident, changes made as a result of previous falls, resident acceptance of risk)	<input type="checkbox"/>
• Evaluation to determine appropriateness of current care/service plan (up to date)	<input type="checkbox"/>	
Identification of root cause(s) (use 5-Whys)	<input type="checkbox"/>	
An action plan to address root causes and prevent recurrence		
• Include resident and/or representative in the process	<input type="checkbox"/>	
• Use SMARTS framework (i.e., Specific, Measureable, Attainable, Realistic, Timely, Supported)	<input type="checkbox"/>	
• Consider effectiveness of previous plans (interventions tried, both successful and unsuccessful)	<input type="checkbox"/>	
• Communication of any adjustments made to the care/service plan (to resident and/or representative and staff; update all applicable care communication tools)	<input type="checkbox"/>	
• Test the plan on a small scale before full implementation (PDSA cycles)	<input type="checkbox"/>	
Identification of next steps (full implementation of action plan if successful, revise action plan and re-test (using PDSA) if unsuccessful)	<input type="checkbox"/>	
Monitor effectiveness of plan over time (modify as necessary)	<input type="checkbox"/>	
If applicable, completion of an Oregon Patient Safety Commission adverse event report	<input type="checkbox"/>	

Appendix B: Fall Investigation Form Examples

1. Example: Falls Investigation Form

Developed by the Nursing Home Expert Panel

This form follows the investigation process outlined in the Falls Investigation Guides. It was developed to use as a comparison tool for your current investigation forms/processes or to be incorporated into individual facility investigation forms and modified as necessary to meet facility needs while maintaining critical investigation components recommended in this guide. A Word version of this form is also available on [OPSC's website](#). You can insert your individual facility name and make it your own. Note that both nursing home and CBC staff position titles are used side-by-side in the form. Your facility may choose to revise the form to reflect your facility specific staff position titles.

2. Example: Nursing Facility Falls Investigation Form

Provided courtesy of Rose Villa, Portland, OR

As a pilot participant testing the guides, Rose Villa created their own falls investigation form based on their experience using the Falls Investigation Guides. This form is available in Word format only on [OPSC's website](#) and is not included within this document. You are encouraged to insert your individual facility name and make it your own.

3. Example: CBC Falls Investigation Form

Provided courtesy of Mount Angel Towers, Mount Angel, OR

Also a pilot participant testing the guides, Mount Angel Towers created their own falls investigation form based on their experience using the Falls Investigation Guides. This form is available in Word format only on the [OPSC's website](#) and is not included within this document. You are encouraged to insert your individual facility name and make it your own.

Falls Investigation Form

First-Responder: Complete the first five pages in order to gather initial information about what happened and why you think it may have happened. Once complete, pass this form off to the individual (per facility protocol) who will complete the investigation process.

Resident Name: _____

Name/Title of Person Completing Form: _____

Date of Fall: _____ **Time of Fall:** _____ **Shift:** _____

Immediate Assessment of Resident

Y N Did the resident sustain an Injury as a result of fall?
If yes, explain:

Y N Were any immediate measures put into place to protect the resident and ensure safety?
Explain:

Vitals T: _____ Pulse: _____ R: _____ BP: _____ Orthostatic PB: _____

Notifications

<input type="checkbox"/>	The physician (SBAR) – Name:	<input type="checkbox"/> Phone <input type="checkbox"/> Fax	Time:
<input type="checkbox"/>	Resident’s responsible party – Name:		Time:
<input type="checkbox"/>	Administrator or Executive Director		Time:
<input type="checkbox"/>	DNS or RN Health Service Dir.		Time:

Gather Initial Information

Interviews

Use open ended questions (e.g., “Tell me a little more about...”) and document the following using their words (attach additional pages as necessary):

Name: Staff or others closely involved (e.g., witness, visitors, etc.)	Location at time of fall	What happened?	Why they think the fall happened
Resident			

Name: Staff or others closely involved (e.g., witness, visitors, etc.)	Location at time of fall	What happened?	Why they think the fall happened
First Responder			

Draw a Diagram of the Scene

Draw a diagram of the scene at the time of discovery in the box below (show furniture, door/doorways, equipment, and other relevant features). Draw a stick-figure to indicate where resident fell/was found (note if face-up or face-down).

Update Care Communication Tools

<input type="checkbox"/>	Alert Charting	Time:
<input type="checkbox"/>	24-Hour Report	Time:
<input type="checkbox"/>	Temporary Care/Service Plan	Time:

Identify Contributing Factors

Use the table below to help you determine what factors may have contributed to the fall. Complete the table as follows:

1. Identify which of the “Possible Contributing Factors” is applicable to the resident (✓ “Applies to Resident/Situation”).
2. Determine which items could have been a contributing factor (CF) to the fall (✓ “CF to Fall”).
3. Explain any items selected as contributing factors in the “CF to Fall” column.
4. For those items identified as “CF to Fall,” identify if it is currently addressed in the resident’s care/service plan (✓ “Part of CP”).

Possible Contributing Factors	Applies to Resident	CF to Fall	If “CF to Fall,” explain:	Part of CP
Resident Factors				
Cognition	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Eyesight/Visual Field	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Footwear/Clothing	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Mobility	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Hearing	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Prosthesis/Splint	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Dominant Side				
Equipment	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Furniture	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Doors/Doorways	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Bathroom fixtures	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Underlying Medical Conditions				
Pain	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Neuromuscular	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Orthopedic	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Cardiovascular	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Recent condition change	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Dialysis	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Dementia	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Neurological (not dementia)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Environment				
Lighting	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Floor (wet, shiny, contrast, uneven)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Equipment placement	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Furniture placement	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Room to move freely/turn radius	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Others present (staff, visitors, residents, etc.)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Bed				
Height/position	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Brakes on/off	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Mattress-type	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Side-rails				
Full/half/other: _____	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Up/Down	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Transfer cane	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Padding	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Fall Mats				
Thickness	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Placement re: dominant side	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

Possible Contributing Factors	Applies to Resident	CF to Fall	If "CF to Fall," explain:	Part of CP
Call Light				
Within reach of resident	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Functioning/working	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Appropriate for resident use	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Placement re: dominant side	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Bathroom				
Toilet seat riser	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Grab bars	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Toilet height	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Commode present	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Toileting schedule	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Restraints & Supportive Devices				
Proper application	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Appropriate for resident	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Alarms				
Appropriate for resident	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Attached to resident	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Turned on	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Functioning/working	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Sounding	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Assistive Devices/Transfer Equipment				
Device present	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Appropriate for resident	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Within resident's reach	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
In need of repair (exposed metal or vinyl)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Brakes on/off	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Footrests up/down/off	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Wheelchair cushion with non-skid pad	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Appropriate positioning	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Appropriate fitting (seat height, depth, foot placement)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Medications				
Time of last dose: _____	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
New medication	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Med. change in the last 24 hours (dose, time, etc.)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Med error in the last 24 hours	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Drug side effects	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Possible Contributing Factors	Applies to Situation	CF to Fall	If "CF to Fall," explain:	Part of CP
Points of Communication Exchange				
Handoffs/shift reports	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Between departments	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Involving patient/resident transfers	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Between staff & resident/family	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Among staff	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
With other organizations/providers	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Care communication tools (i.e., care plan, documentation, 24-hour report, alert charting, etc.)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

Possible Contributing Factors	Applies to Situation	CF to Fall	If "CF to Fall," explain:	Part of CP
General Communication Factors				
Lack of information	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Language barriers	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Hard to read handwriting/fax	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Adequate communication (accurate, complete, understood)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Environmental/Work Area				
Distractions and interruptions	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Work area design	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Work allocation/work load	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Stress levels	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Resident Factors				
Language/culture	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Sensory impairment	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Family dynamics/relationships	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Cognition	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Resident assumption of risk	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Behavioral problems/issues	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Organization Factors				
Resident status info. shared/ used in a timely manner	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Resident/Family involved in Care planning process	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Culture encourages reporting safety issues	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

Fall History

Y N | Has the resident had a fall in the last 30 days?
If yes, date:

Y N | If yes (to above), was there an injury as a result of the fall?
If yes, explain:

Conclusions – Root Cause(s)

Use the 5-whys to determine **root cause(s)** of this fall (there are likely multiple root causes). Continue to ask “why” until you can’t ask “why” any longer.

What do you believe to be the root cause(s) of this fall (list below)?

When complete, sign below and give this form to the individual (per facility protocol) who will complete the investigation processes and begin action planning.

Signature: _____ | **Date:** _____

Name, Title (please print): _____

Investigation Review, Follow-up & Action Planning

Review the initial investigation and complete the following section (typically the RCM in a nursing home or other facility specified staff in the CBC setting). Once complete, pass this form off to the individual(s) (per facility protocol) who will complete final review.

Use the table below to help you determine what medication related factors may have contributed to the fall. Complete the table as follows:

1. Identify which of the "Possible Contributing Factors" is applicable to the resident (✓ "Applies to Resident").
2. Determine which items could have been a contributing factor (CF) to the fall (✓ "CF to Fall").
3. Explain any items selected as contributing factors in the "CF to Fall" column.
4. For those items identified as "CF to Fall," identify if it is currently addressed in the resident's care/service plan (✓ "Part of CP").
5. Consult Pharmacist and Physician as appropriate.

Possible Contributing Factors	Applies to Resident	CF to Fall	If "CF to Fall," explain:	Part of CP
Medications				
Time of last dose: _____	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
New medication	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Med. change in the last 24 hours (dose, time, etc.)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Med error in the last 24 hours	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Drug side effects	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Diuretics				
Edema (lower extremity)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Lung status (CHF)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Change in urgency & void	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Change in fluid intake (last 72 hours)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Laxatives				
Prescribed	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Given	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Anti-psychotics				
Most recent AIM	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
EPS (involuntary movement)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Narcotics/Analgesics				
Pain level at last dose: _____	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Pain level at time of fall: _____	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Anti-Hypertensives /Cardiovascular				
Baseline BP: _____	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Postural BP: _____	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Vital Signs: P: _____ R: _____ BP: _____ O ₂ sats: _____	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Skin (cold/clammy)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Hypo-/Hyperglycemics				
Time of last insulin/oral agent dose: _____	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Last p.o. intake time: _____	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Skin (cold/clammy)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
CBG Results	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

Conclusions – Root Cause(s)

Use the 5-whys to determine **root cause(s)** of this fall (there are likely multiple root causes). Continue to ask “why” until you can’t ask “why” any longer.

What do you believe to be the root cause(s) of this fall (list below)?

Develop an Action Plan

Develop an action plan that (1) addresses identified root cause(s), (2) uses SMARTS framework (Specific, Measurable, Attainable, Realistic, Timely, Supported), (3) and answers the question, “What can we do to keep similar events from happening again?” (Describe action plan below)

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Resident and/or responsible party included in the process (consider goals and preferences) |
| <input type="checkbox"/> | Effectiveness of previous plans considered (interventions tried, both successful and unsuccessful)
List previous interventions: |

Communicate Action Plan

- | | |
|---|--|
| <input type="checkbox"/> Y <input type="checkbox"/> N | Care/Service plan revised to reflect action plan?
If no, explain why: |
|---|--|

The following were notified of the new action plan:	
<input type="checkbox"/> Resident <input type="checkbox"/> Nursing staff <input type="checkbox"/> CNA/care staff <input type="checkbox"/> DNS/RN Health Service Dir.	Date:
Other staff notified (as needed):	
<input type="checkbox"/> Dietary <input type="checkbox"/> Maintenance <input type="checkbox"/> Housekeeping <input type="checkbox"/> Social Services <input type="checkbox"/> Activities <input type="checkbox"/> Others (list):	Date:

Monitor Effectiveness of Action Plan

Monitoring Plan

The action plan will be monitored as follows:	Timeframe (how long?):
---	------------------------

When complete, sign below and give this form to the individual(s) (per facility protocol) who will complete the final review.

Signature:	Date:
------------	-------

Name, Title (please print):

Final Review

Final Reviewers (typically clinical management and administration, e.g., DNS and Administrator or RN Health Service Dir. and Executive Dir.): Review the fall investigation and action plan and complete the section below.

Final Reviewer (DNS or RN Health Service Dir.)

Additional comments, questions, or changes related to fall investigation and action plan:

Final Reviewer (Administrator or Executive Dir.)

Additional comments, questions, or changes related to fall investigation and action plan:

Notifications

<input type="checkbox"/> Y <input type="checkbox"/> N	Has abuse been ruled out?
<input type="checkbox"/> Y <input type="checkbox"/> N	If no (above), has Adult Protective Services been notified? If no, explain why:
<input type="checkbox"/> Y <input type="checkbox"/> N	If fall resulted in in hospitalization or death, was an adverse event report submitted to the Oregon Patient Safety Commission (applies to NH program participants only)? If no, explain why:

Signature: _____ | **Date:** _____

Name, Title (please print): _____

Administrator Signature: _____ | **Date:** _____

Name, Title (please print): _____

Appendix C: Integrating the Guides into the Investigation Process

Using the Guides

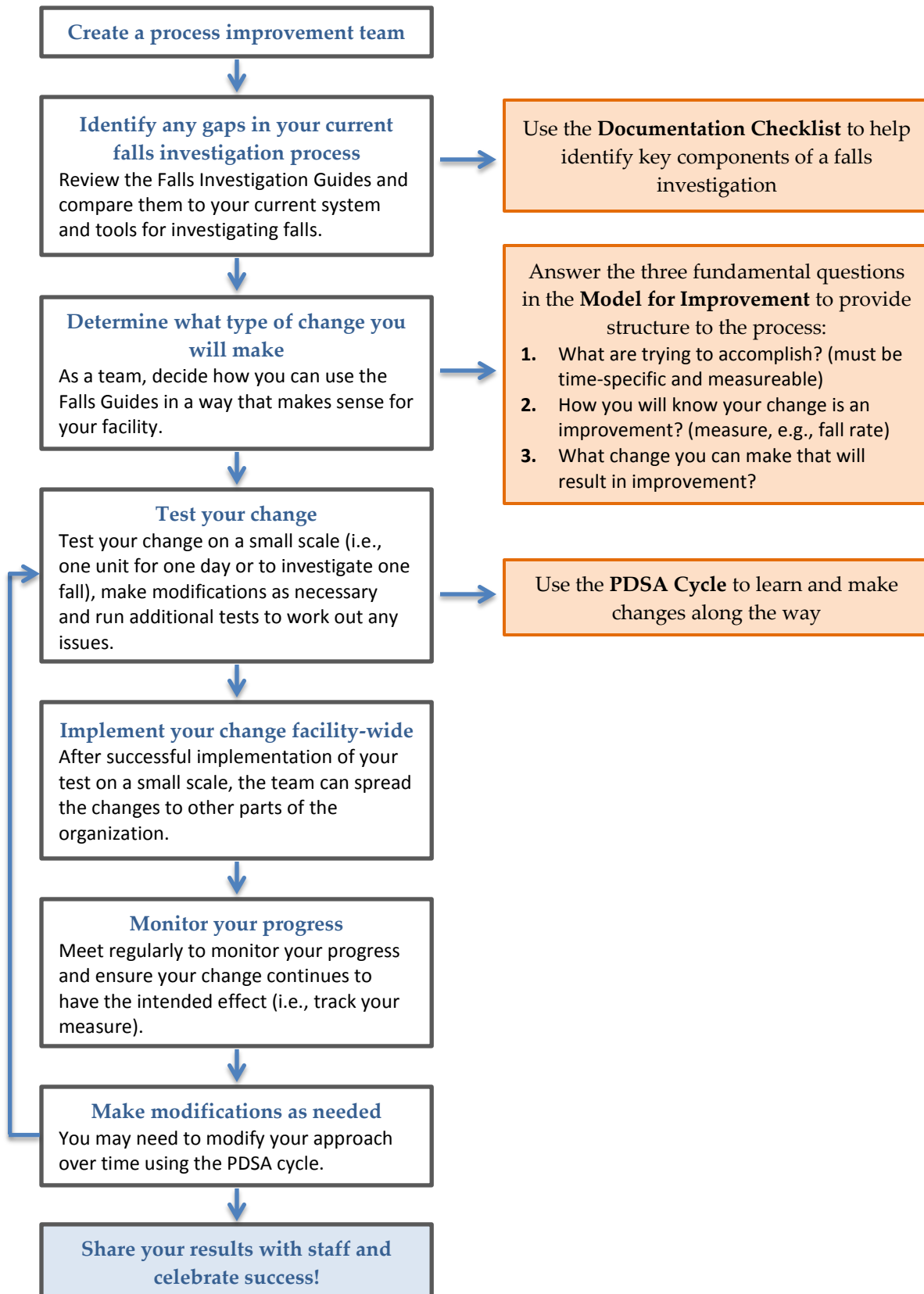
The table below describes an incident investigation and findings from a facility without utilizing the Falls Investigation Guides (“Old”), an investigation and findings utilizing the guides (“New”), and an investigation process guidelines crosswalk. Each investigation (the “Old” and “New”) is compared against the investigation process guidelines to determine if it contains the necessary components; a “Y” (yes) or “N” indicates if the investigation met the guidelines. Utilize the *Falls Investigation Guide Documentation Checklist* ([Appendix A](#)) to ensure your investigation has the necessary components.

Incident: A resident stood quickly from her wheelchair and lost her balance. A staff member who was standing by was able to grab hold of the gait belt currently on the resident and assist her to the floor.

Old Incident Investigation (without the guides)	Y/N	Investigation Process Guidelines	Y/N	New Incident Investigation (with the guides)
<p>Investigation summary: Resident stood quickly from chair. Resident lost balance. Staff member standing nearby eased resident to floor. In room, lights on. No injuries. Alarm was on the chair and alarm sounded.</p> <p>Findings:</p> <ul style="list-style-type: none"> Documentation noted, “Successful incident” (Panel interpretation: current facility practices related to falls protocol were followed). No documentation of changes to plan of care interventions to prevent recurrence; all interventions in place. No documented reference as to why resident was standing up. Interviews with residents, staff and/or witnesses not documented. Resident noted to be “impulsive” and “unpredictable.” <p>Action Plan: None</p>	N	<ul style="list-style-type: none"> Thorough investigation to evaluate and identify the risks for falls (antecedents, interviews) documented. 	Y	<p>Investigation summary: Resident was in room prior to dinner and staff came to escort resident to meal. Resident had the sudden urge to go to the bathroom, standing quickly. Resident lost balance and staff was able to ease them to the floor. Alarm began to sound once resident began to fall.</p> <p>Findings: Resident has history of being impulsive and attempting to stand independently. Resident was not wearing shoes or slip-resistant socks at time of fall. Resident had to wait in his room to come to the dining room with one-on-one assistance; he becomes agitated while waiting. Recent medication change likely cause of urinary urgency.</p> <p>Action Plan: Plan of care will be updated to include safe footwear when resident is out of bed. Resident’s plan of care also updated to include reminder to use bathroom before meals and activities and an assisted walk around the building before being seated for a meal. New plan of care interventions will be shared with all staff and monitored for 7 days. If successful, they will be fully implemented. If not, new interventions will be planned and implemented.</p>
	N	<ul style="list-style-type: none"> Investigation of cause of accident including, if indicated, revised interventions to plan of care to prevent recurrence. 	Y	
	N	<ul style="list-style-type: none"> Documentation of monitoring the effectiveness of the interventions and modifying them as necessary. 	Y	
	N	<ul style="list-style-type: none"> Plan of care implemented consistently. 	Y	
	N	<ul style="list-style-type: none"> Plan of care interventions based on minimizing resident’s risks to try to prevent avoidable accidents. 	Y	
	N	<ul style="list-style-type: none"> Plan of care modified as needed based on response, outcomes, and needs of resident. 	Y	
	N	<ul style="list-style-type: none"> Reporting or documentation of reporting to a state agency if abuse/neglect suspected. 	Y	

How to Integrate the Falls Guides into the Investigation Process

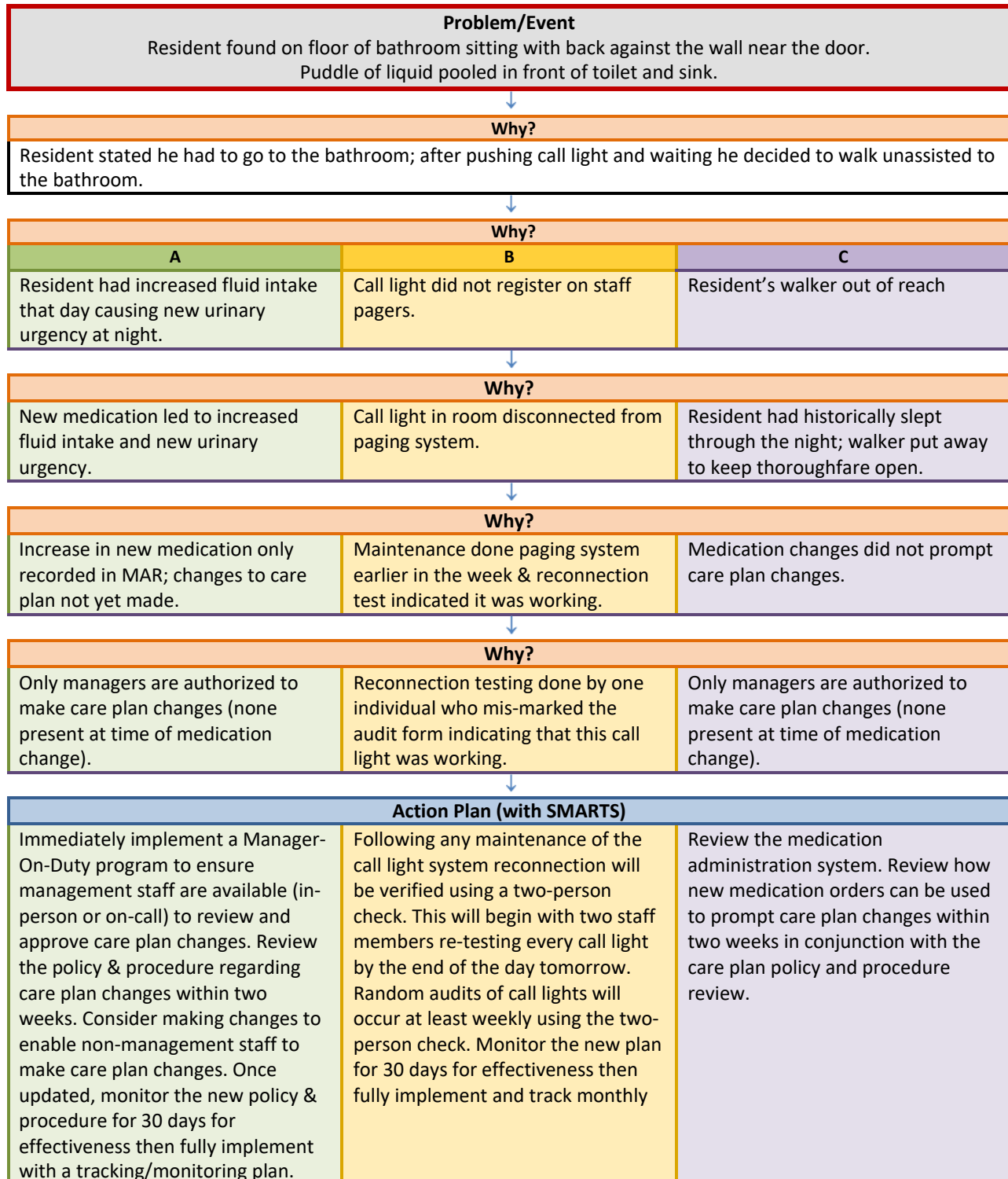
The process map below outlines how the Falls Guides could be integrated into your current investigation process. Several quality improvement tools introduced in this How-to Guide are used.



Appendix D: Glossary of Terms

5 Whys

A question-asking method used to uncover the underlying cause(s) of an event. Uncovering the root cause(s) leads to an action plan that is more likely to prevent the event from happening again. An example of utilizing the 5-whys process to investigate the causes of fall is outlined below. Columns A, B, and C follow different causes that contributed to the same event through the 5-whys process.



Contributing Factors

An aspect of the situation or care process that plays a part in the adverse event; these are usually system-level, not person-focused; adverse events are usually the result of many contributing factors.

Plan-Do-Study/Check-Act (PDS/CA)

PDS/CA is shorthand for testing a change by planning it, trying it, observing the results, and acting on what is learned. This is the scientific method used for action-oriented learning. (Source: ihi.org)



Plan: Formulate action steps.

Do: Implement steps on a trial basis.

Study/Check: Monitor effectiveness of action steps for specified time (1 week, 30 days, etc.)

Act: Review effectiveness of plan, then adopt steps or revise plan

Model for Improvement

A model to test change quickly that combines the PDSA and the following three questions:

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in an improvement?

Root Cause Analysis (RCA)

A systematic process for identifying the most basic or causal factor(s) underlying variation in performance; the intensive, in-depth analysis of a problem event to learn the most basic reason(s) for the problem which if corrected will minimize the recurrence of that event. For more information on RCA, please refer to *Oregon's Guide to Root Cause Analysis in Long Term Care, Investigating with a Different Lens*. (Available at: <http://library.state.or.us/repository/2010/201009130912581/index.pdf>). A model of how RCA is used to investigate a fall is also available in Appendix E.

The RCA process involves:

- Determining what happened.
- Identifying what factors contributed to the event.
- Developing an action plan to reduce the likelihood of a similar event.

The steps in Oregon's Root Cause Analysis process are:

1. Gather & document initial information
2. Fill in the gaps
3. Analyze
4. Develop an action plan
5. Evaluate results

SBAR Communication (Situation-Background-Assessment-Recommendation)

SBAR is a technique that provides a framework for communication between members of the health care team about a resident's condition. SBAR is an easy-to-remember, concrete mechanism useful for framing any conversation, especially critical ones, requiring a clinician's immediate attention and action. It allows for an easy and focused way to set expectations for what will be communicated, and how, between members of the team, which is essential for developing teamwork and fostering a culture of patient safety. (Source: ihi.org)

SMARTS for Action Planning

SMARTS is a technique used to map out action plans. This step-by-step approach gives action plans the structure required to see results. Action plans with SMARTS are:

- **Specific** (identify who, what, where, when, how, why)
- **Measurable** (set criteria for tracking progress toward completion)
- **Attainable** (there is a reasonable chance of success)
- **Realistic** (willing and able to work on it)
- **Timely** (set time frame and end date)
- **Supported** (determine resources to support your action plan, i.e., organization commitment, outside resources such as books, articles, courses, other LTC experts)

Appendix E: Additional Resources

1. Resource — Root Cause Analysis Case Example

This resource walks you through a fall investigation using root cause analysis.

2. Tool — PDSA Worksheet for Testing Change

Provided courtesy of Acumentra Health

3. Article — Putting Patient Safety First: Creating a culture of patient safety in a nursing facility improves clinical outcomes and diminishes liability

Brownlee, Maurice, A., RN. Putting Patient Safety First: Creating a culture of patient safety in a nursing facility improves clinical outcomes and diminishes liability. A new CMS initiative can help. *Provider Magazine*. April 2009; 39–43.

4. Article — Rethinking the Use of Position Change Alarms

(available online only, see link below)

Brady, Cathie, Frank, Barbara, Rader, Joanne. *Rethinking the Use of Position Change Alarms*. January, 2007.
http://anha.org/members/documents/RethinkingUsePositionAlarms_072208.pdf. Accessed August 22, 2010.

5. Resource — State Operations Manual Appendix PP – Guidance to Surveyors for Long Term Care Facilities

(available online only, see link below)

[cms.gov/manuals/Downloads/som107ap_pp_guidelines_ltcf.pdf](https://www.cms.gov/manuals/Downloads/som107ap_pp_guidelines_ltcf.pdf). Accessed February 22, 2011.

6. Resource — Oregon Administrative Rules for Long Term Care Settings (i.e., nursing facilities and different community-based care settings)

(available online only, see link below)

[oregon.gov/DHS/spwpd/ltc/ltc_guide/whataremychoices.shtml](https://www.oregon.gov/DHS/spwpd/ltc/ltc_guide/whataremychoices.shtml). Accessed February 22, 2011.

Root Cause Analysis Case Example

Event

Resident fell at the bedside while on her way to the restroom. She was found on the floor with a bleeding skin tear to her left hand and an abrasion to her left knee; her wheelchair was tipped forward. The physician was notified and a treatment for her left hand skin tear was ordered as well as an x-ray to her left knee and right hip.

Gather & Document Information

Documentation/Chart:

- 78 year old, female
- Diagnoses: Right hip pinning, urinary urgency, congestive heart Failure (CHF), hypertension (HTN)
- Current medications: Blood thinner, two anti-hypertensive meds, a diuretic, pain meds as needed.
- History: Had a fall at home after getting caught in her dog's leash which resulted in a fractured right hip. Was admitted to the hospital for surgery (hip pinning) and is now in a skilled nursing facility for rehabilitation.

Staff Interview/Observation:

- Resident was witnessed resting in her bed at 1030 and aide moved the bedside table close to bed in preparation for lunch.
- A staff member heard her call out at 1115.
- The aide that found the resident on her left knee, her left hand was bleeding, and her right leg was extended straight and in alignment with her body.
- The resident does not use side rails.
- The resident's wheel chair was behind her, but tipped forward.
- Resident's wheelchair brakes were not locked.

Resident Interview:

- The resident states she was getting up to use the bathroom.
- The resident does not complain of any increase in right hip pain and her surgical incision is intact.
- She does state that her left knee is painful as is her left hand where she hit it on the bedside table.
- The resident stated that she tried to sit in her wheelchair because she became dizzy on standing.

Other Data Sources:

- _____
 - _____
-

Fill in the Gaps

- Identify possible contributing factors
- Identify the sequence of events in order to clearly understand what took place and the problem/issue:



Analysis

- Identify contributing factors
- Use the 5-Whys to uncover root causes (continue asking "why")

Develop an Action Plan

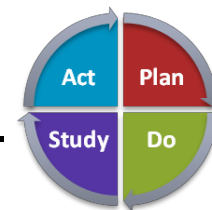
- Include Interdisciplinary Team (IDT) in process
- Ask, "What can we do to keep similar events from happening again?" (on a system-level)
- Address identified root causes
- Develop action plans with SMARTS (specific, measurable, attainable, realistic, timely, supported)

Evaluate Results

- Use PDSA to plan, test, and implement action plans (PDSA: Plan, Do, Study, Act)
- Track and trend data over time to ensure action plan met intended goal

PDSA Worksheet for Testing Change

Achieving your goal will require multiple small tests of change to reach an efficient process and the desired results.



3 Fundamental Questions for Improvement

1. What are we trying to accomplish (AIM)?
2. How will we know that a change is an improvement (MEASURE)?
3. What changes can we make that will lead to improvement (CHANGE)?

Plan

What is your first (or next) test of change?	Test population?	When to be done?
List the tasks needed to set up this test of change: 1. 2. 3. 4.	Who is responsible?	When to be done?
Predict what will happen when test is carried out:	Measures to determine whether prediction succeeds:	

Do

Describe what happened when you ran the test (i.e., what was done, measured results, observations).

Study

Describe how measured results and observations compared with the predictions.

Act

Determine next steps (i.e., modify idea and retest {Adapt}, spread idea {Adopt}, test a new idea {Abandon this idea}).