Proactive Falls Management:
A Review of Risk Identification, Preventative Strategies/Care Planning, and Staff Empowerment

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PREMIER THERAPY

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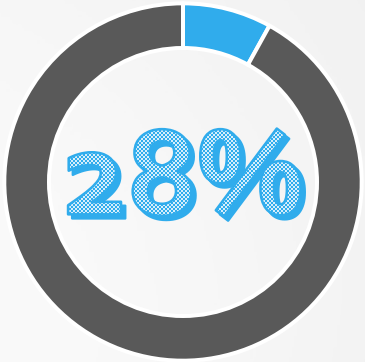
OBJECTIVES

Learning Outcome 1: Identify patients at risk for falls through assessments and tools

Learning Outcome 2: List the steps, systems, and training required for a successful falls program

Learning Outcome 3: Identify the roles of each discipline and how the IDT impacts falls within the facility

PREVALENCE OF FALLS



28% of people aged 65 and older fall each year **(Approximately 1 out of 4 adults) for a total of 36 million falls each annually**

- 37 % need medical treatment
- **3 million** older adults are treated in the ER for falls
- Over 800,000 adults are hospitalized because of a fall each year (head injury and hip fractures).

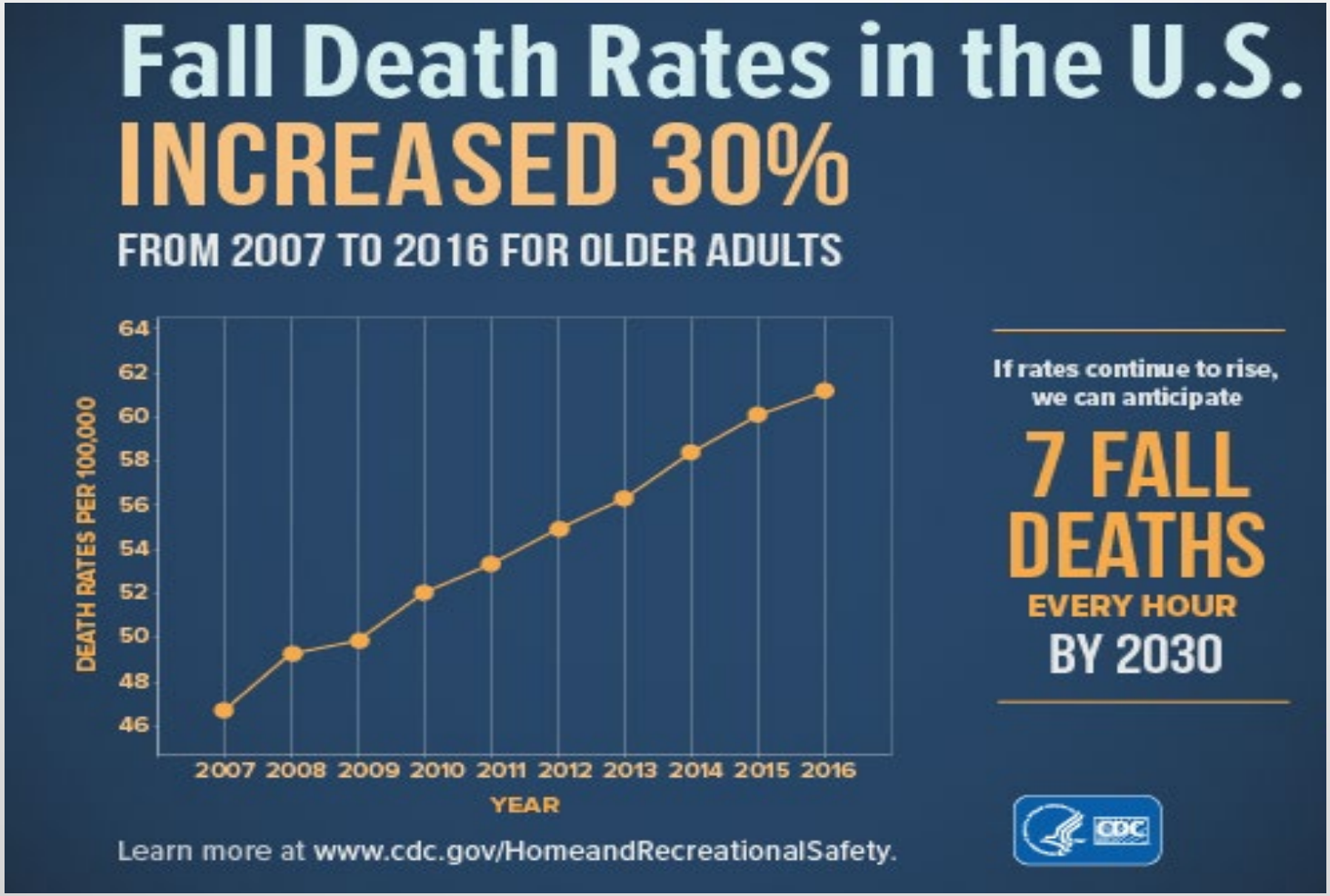
Source: CDC.gov

PREVALENCE OF FALLS

- 1 fall can double your chance of falling again.
- More than 95% of hip fractures are due to falls.
- Falls are the most common cause of TBIs.
- Falls are the leading cause of injury, hospital admissions, and death in people 65 years and older.

https://www.cdc.gov/steadi/index.html

CDC Estimates Fall Deaths



COST OF FALLS

- Total medical costs for falls were greater than **$50 BILLION** for non-fatal and $754 MILLION for fatal falls
- Medicare and Medicaid paid for 75% of these costs
- Average hospital cost for a fall injury per incident is $30,000
- The cost of treating falls injuries goes up with age
- Pennsylvania is 5th highest in country

REASON FOR FALLS PREVENTION

Fall Prevention is a top focus and quality measure for Medicare due to:

- The frequency of falls in the older population
- The severity of injuries and even death that can result
- The significant cost to the healthcare system
- Improvement in the quality of life for residents

CAUSES OF FALLS

1 Biggest Risk – History of Falls

If a person fell in the hospital and is admitted to SNF: Danger zone is first 2 weeks in the skilled nursing facility after admission.

Almost **70% of those patients will fall again**, and 5% will die from the fall.

- Mostly attributed to acute illness, environmental change and adverse drug reactions

Risk Factors with Strongest Association with Falling

- Gait Problems
- Use of Walking Aide
- Vertigo
- Parkinson's Disease
- Anti-epileptic Drug Use
- Postural Hypotension
- Poor Sleeping Patterns

Intrinsic Risk Factors for Falls

- Co-morbidities
- Fluctuating Vitals
- Cognitive Issues
- Behavior Issues
- Vitamin Deficiencies (Vit. D)
- Balance Deficits
- Multiple Drug Regimen
- Lower Body Weakness
- Pain/Foot Pain
- Gait Abnormalities *(i.e., step length, velocity, BOS)*
- Psychosocial Issues *(i.e., Depression)*
- Nutritional Deficits
- Visual Deficits
- Acute Illness *(i.e., UTI)*
- Consider other Pelvic/Urologic Disorders

Intrinsic Risk Factors for Falls

- Decreased Sensation *(i.e., DM)*
- Incontinence
- Arthritis
- Female
- Dizziness
- Orthostasis *(i.e., hypotension)*
- Functional Limits
- > than 80 years old

Extrinsic Risk Factors for Falls

- Poor lighting
- Cluttered living space
- Uneven floors, wet areas
- Unstable furniture
- Unstable bed wheels
- Ineffective wheelchair brakes
- Missing equipment parts
- Improper footwear
- Hard-to-manage clothing
- Inaccessible personal items
- Wheelchair positioning issues

The First 48 Hours - Risks

- Increased disorientation/confusion
- Falls
- PRN use of antipsychotics
- Increased pain
- Physical aggression and other behaviors
- Elopement
- Re-hospitalization
- Poor dietary intake

The First 48 Hours - Considerations

- Room Placement
  - Too near the nurses' station – loud, disruptive
  - Too far from the nurses' station – no supervision
- Consider 1:1 from family, nursing, activities in a quiet room without roommate noise
- Can use that time for individualized assessments
- Comprehensive Medication Review
- Baseline and Routine Vital Signs/Tracking
- Bowel/Bladder Pattern Review

What diagnosis currently has the highest incidence of falls currently?

Given current industry barriers

Dementia Specific Risk Factors

Persons with dementia are **2 to 3 times more likely to fall** compared to persons without dementia (Kropelin TF, et al.)

- Changes in insight – judgment and reasoning
- Recognition of sensory input – sight, touch, and sound
- Decreased communication
- Decreased coordination of movement

Dementia Specific Risk Factors

- Disrupted ability to interpret environment
  - Illusions and misperceptions e.g., depth, light intensity, color, pattern and temperature
- Memory loss
- Poor learning potential
- Inability to initiate tasks – leads to immobility

Resident Specific Fall Interventions

Proven Prevention to Reduce Fall Risk

- **Vitamin D supplement- 200 vs higher dosage?**
  - Higher dosage not effective
- **Exercise**
  - should have **strengthening exercises combined with balance exercises with controlled movement** for greatest effect on reducing falls *(ex., Tai Chi, Otago Exercise Program)*
  - walking alone does not reduce risk of falls

Proven Prevention to Reduce Fall Risk

Visual Assessment and Management

- Be aware that a resident can have an increase in fall risk when change in eyewear occurs
- OT may need to be involved for a transition period for compensatory/safety techniques

Withdrawal from Psychotropic Medication17,18

- physician oversight and managed

Proven Prevention to Reduce Fall Risk

Pacemakers

- Underlying cardiac problems that lead to dizziness, blackouts, and confusion can be reduced by inserting a pacemaker
- ***Reduced falls by 2 out of 3 persons***

Multifocal lenses

- increase fall risk in community but not familiar territory

Proven Prevention: Therapy

Comprehensive Evaluations by OT,PT and ST as appropriate

Recommendations to other IDT members as needed such as psychiatrist, dietary, respiratory therapist, wound nurse etc.

Proven Prevention: Therapy

Home/Environment Safety [17]

- Therapy can look at environment and homes for safety issues and make recommendations
- Therapy can assess footwear and gait deviations

Possible PT/OT Interventions

- Progressive Strengthening Program
- Pain Management Program through stretching, modalities, positioning and adaptive equipment
- Wound Care Program
- Static and Dynamic Balance Program

Possible PT/OT Interventions

- ADL Re-training
- Environmental Modifications
- Home Safety Assessments
- Prosthetic and Orthotic Assessments/Fittings/Training
- Behavior Modifications (CALMM)
- Low Vision Techniques and Adaptations

Possible ST Interventions

- Cognitive–Linguistic Assessment
- Consulting with Dietary on Nutrition and Intake
- Techniques to Reduce Behaviors
- Dementia Programming (CALMM)
- Environmental Stimulation

Treating Falls in Dementia

Treatment of the dementia patient with falls requires an interdisciplinary approach.

> Treatment interventions should target identified needs to optimize the entire care team's health and reduce everyone's health risks. People impacted by dementia—both patients and caregivers—have changing needs for licensed/skilled and unlicensed/unskilled services over time. Their needs may span 5 health domains—behavioral, cognitive, mental, physical, and functional—so care managers should consider all 5, per the results of an international consensus study.
>
> McCarthy 2018

Resident Specific Treatment Considerations in Dementia

People on the dementia spectrum who refuse to move (behavioral domain) and have non-amnesic (non-Alzheimer's) dementia (cognitive), fear of falling (mental), postural collapse (physical), and difficulty walking (functional), may require *different* care management interventions than do people who are chronic walkers/rockers (behavioral) with amnesic-type (Alzheimer's) dementia (cognitive), depression (mental), pain (physical) and difficulty walking (functional).

Mc Carthy, 2018

Abilities Most Preserved in Dementia

Functions last to decline in persons with Dementia. Base interventions on:

- Residual Praxis and Knowledge
- Music and Art
- Humor and Intelligence
- Honesty and Innocence
- Physical Strength
- Resourceful
- Recall of traumatic or important events

The Importance of Staging

Dementia affects many areas of function at different rates.

Staging the dementia determines the current function and how to develop a plan to best care for the affected person.

Typically, once staged, the person will move to more advanced stages as time passes.

Treatment strategies can facilitate longer holding patterns from one stage to the next.

The Importance of Staging

- Provides basis for caregiver education, strategies, approaches in developing patient-centered plan of care
- Helps staff/family provide quality care while focusing on preserved abilities, not limitations

Methods of Staging

Accepted Scales

- NCCDP – 3 stages
- Global Deterioration Scale – 7 stages
- Allen Cognitive Levels – 6 levels:

  3 Components

  - Attention
  - Motor Control
  - Verbal Performance

Late-Stage Characteristics

- Mental capability of 3 to 5-year-old
- Behaviors increase
- Combativeness/Agitation
- Elopement/Wandering
- Sun-downing
- Falls – more difficulty walking
- Perseveration
- Need total assist for tasks
- Yelling
- Nutritional/ Hydration difficulties

  (swallowing , feeding)

Late-Stage Strategies

- Behaviors occur due to unmet need and lack of ability to communicate it
  - Assess Behavior -Figure out what root cause is and plan what can improve it
- Music Sessions - Music and Memory
- Supervised/Assisted activities
- Do not limit walking
- Eliminate stressors that may make them wander:
  - cold temperature
  - change in routine
  - extra noise/chaos
  - incontinence

Late-Stage Strategies

- Wheelchair wandering if physically unsafe to walk
- Involve with low level activities
- Hoarding- let them collect things as long as safe, fill container, give dollar if needed, give alternative activities
- Continue use of Memory Book (Montessori Techniques)

Late-Stage Strategies

Yelling

- Studies have shown that giving an appropriate dosage of Acetaminophen has helped constant yelling due to relief of pain; pain is overlooked as a catalyst for yelling
- Music therapy- can use headphones

Late-Stage Strategies

Agitation

- Sleep deprivation- keep on diurnal rhythm; keep them busy during day
  - try not to let them sleep, wake up same time everyday no matter what and try to get outside to know difference between day and night
- Assess for Depression and root cause of agitation
- Music and cognitive games
- Cooking
- Pet visits
- Snacks
- Physical activity
- Visual stimulation

Late-Stage Strategies

Falls increase

- Good activity plan- keep involved and busy
- Close supervision
- Use of hip protectors
- De-clutter space
- Regular exercise

COMPREHENSIVE FALLS PROGRAM- *What is it?*

Comprehensive Program Definition:

An all-inclusive program covering a broad scope involving people with extensive understanding to provide protection against most risks by focusing on safety and prevention

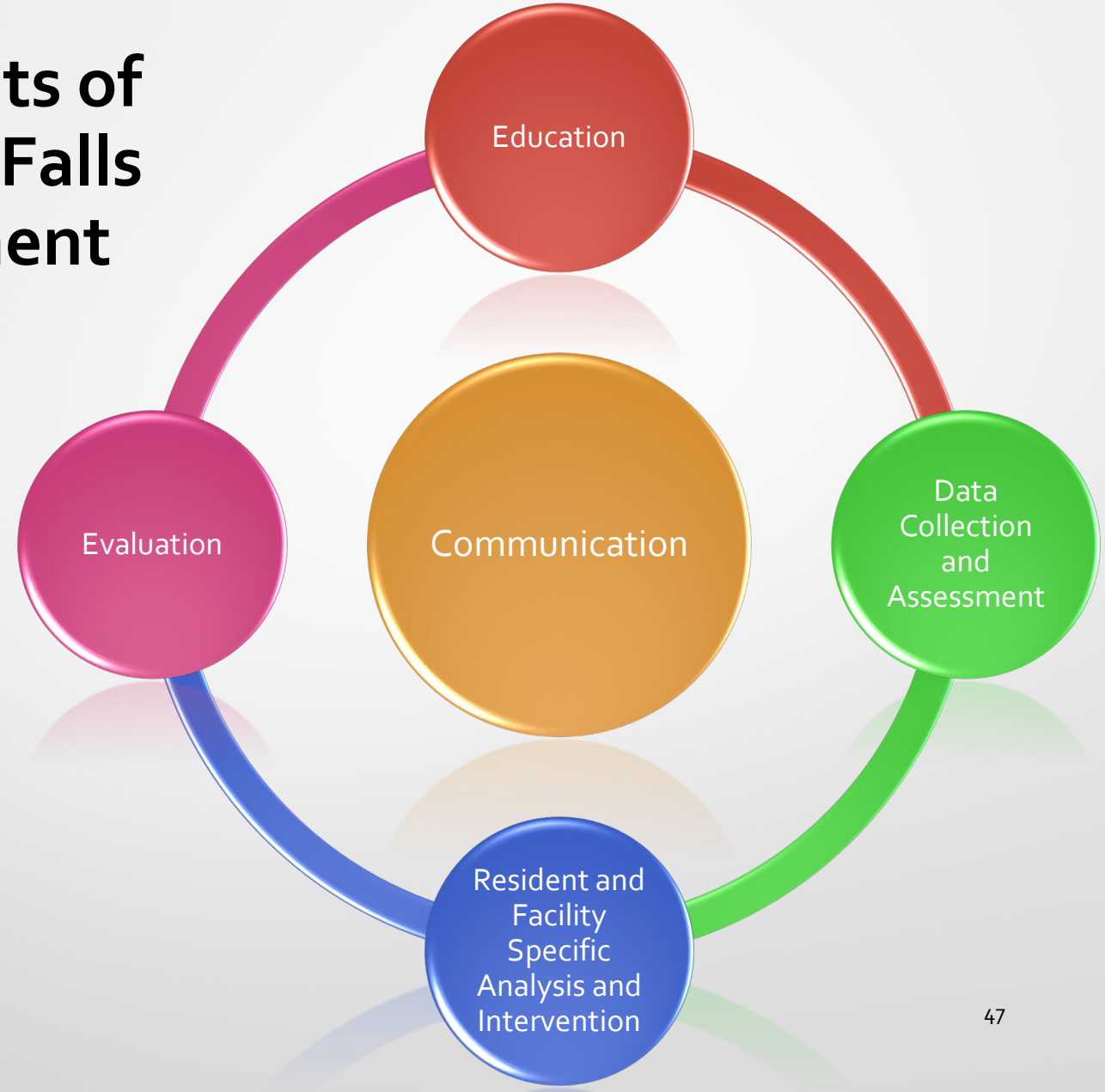
Developing A Culture of Safety

Important Steps in Ensuring the Falls Program is effective and integrated into the facility

- Clearly defined safety policy
- Empowered staff work towards a common goal
- Fosters an environment of "no blame/no shame" where staff members can report errors and safety concerns without fear of punishment
- Data is reviewed, not kept hidden away

https://www.medscape.org/viewarticle/504373_2

Components of Successful Falls Management



Choosing Your Falls Team

- Nursing
- Physician, NP, PA
- Therapy
- MDS
- SW
- Administrator
- Restorative
- Aides
- Maintenance

*not all inclusive

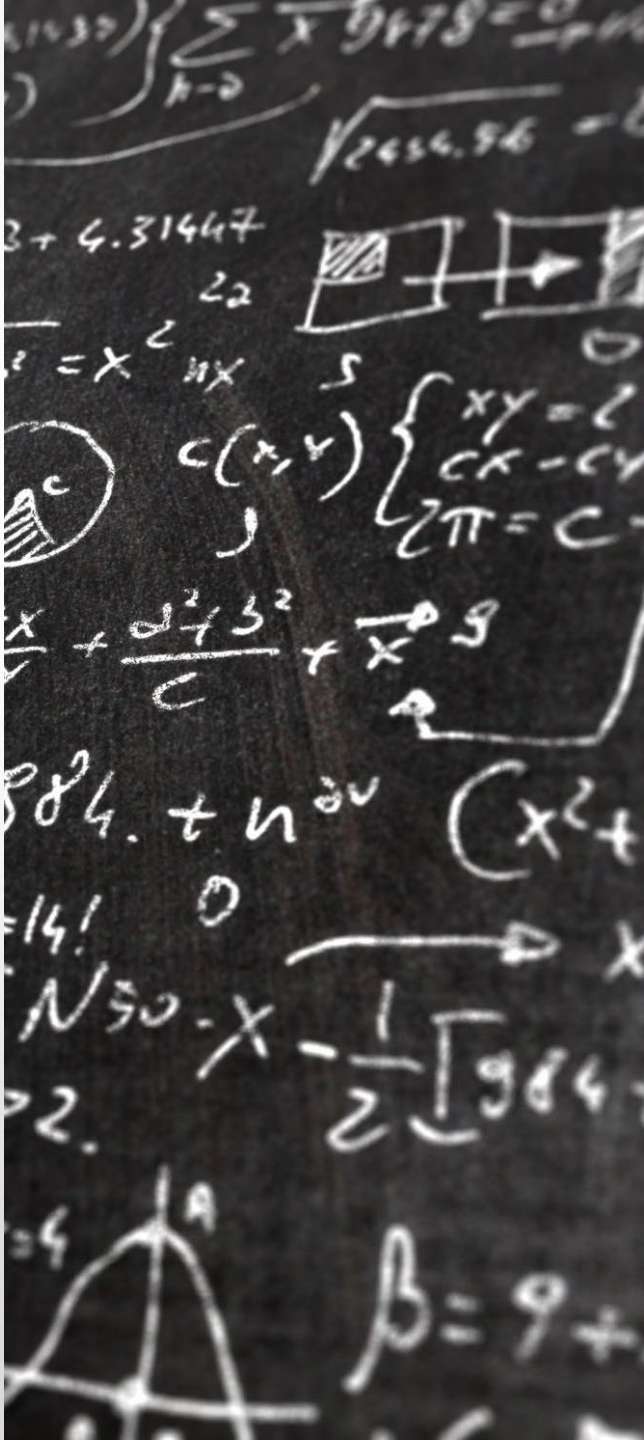
Choose Coordinator Wisely

- Helps to establish and ensures P & P are followed
- Coordinates Meetings/Agenda/Task Accomplishment
- Leads team in planning next steps
- Evaluates meeting progression and effectiveness

Traditional Falls Program Structure

1. Assessment and/or investigation of new admits\new falls/quarterly assessments
2. Short Term measurements in place with care plan development upon further assessment information
3. Daily discussion of "At-risk" residents pertinent meetings. Shift change, morning meeting, walking rounds etc.
4. Modify care plans as needed to meet changing needs of resident
5. QAPI approach – data/report reviews and changes to processes

Current Program Structure Assessment



Sample Falls Management Program Self-Assessment Tool

EMORY CENTER FOR HEALTH IN AGING

The Falls Management Program

Self-Assessment Tool

The purpose of the FMP Self Assessment Tool is to identify what processes of care your facility has in place and what areas need improvement. It is divided into 7 areas of focus. Use your facility's policies, procedures and general practices to answer the questions listed under the first 4 areas (A, B, C, D). To answer the questions listed under the last 3 areas (E, F, G) in the Chart Audit, select a minimum of 5 residents who have fallen during the last 6 months. Answer the questions based on the documentation you find in each resident's chart and care plan. Further instructions are provided in the Chart Audit section. Complete the Plan for Improvement when finished.

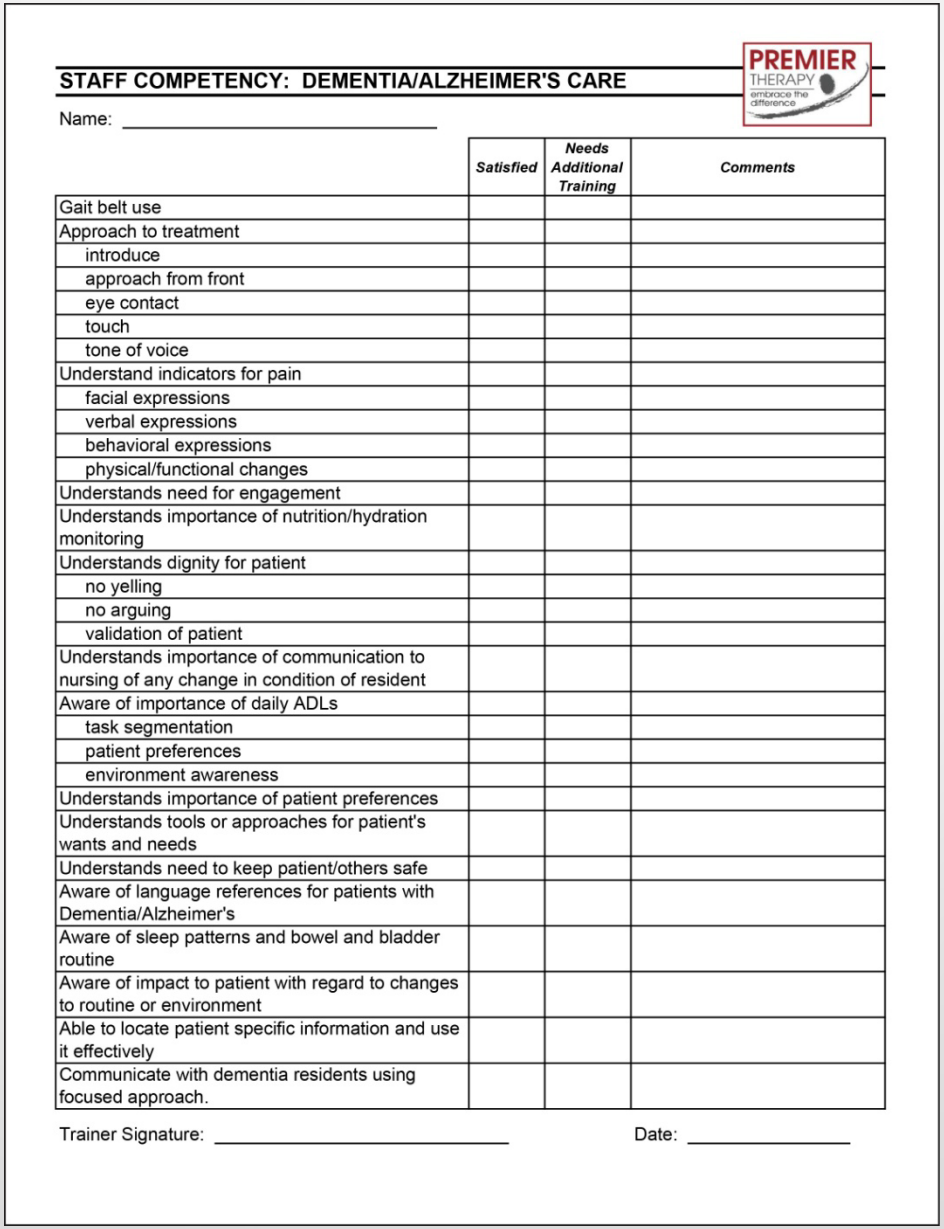
A. Culture, Organizational Commitment and Team Skills (Chapter 1)	Yes	No	Comments
1. Updated policies and procedures for a comprehensive Falls Management Program?			
2. Appointed falls team leader and resource person for staff?			
3. Selection of staff members (including one or more CNA's) for interdisciplinary falls team?			
4. Weekly falls team meeting using ground rules, a leader, timekeeper and recorder?			
5. Effective team problem solving to develop and monitor interventions for recurrent fallers?			
6. Administrator and DON attend team meetings periodically and monitor falls data at least monthly?			
7. No blame/no shame environment with honest investigation and reporting by staff?			
8. Celebration of success stories and rewards for caregivers who reduce falls?			
9. Adequate staffing for leader to spend 8 hours/week and team to meet for 30 minutes/week?			
10. Funds for adaptive equipment, environmental modifications and wheelchair improvements?			
11. Activity programs for frequent structured supervision of residents?			
12. Employee orientation materials emphasize importance of and facility commitment to resident safety?			
B. Data Collection and Analysis (Chapter 3)	**Yes**	**No**	**Comments**
1. Accurate completion of fall incident report form by all licensed staff?			
2. Monthly falls analysis by: location and time of fall	❑	❑	
shift and day of week	❑	❑	
type of injury	❑	❑	
3. Monthly falls analysis by # of falls, fallers, patients ≥ 2 falls and falls with serious injury?			
4. Falls data reported to medical director and primary care providers every quarter?			
5. Feedback about falls data given to direct care staff each month?			
6. Falls data trended over 6 months or more?			

https://www.ahrq.gov/patient-safety/settings/long-term-care/resource/injuries/fallspx/manapb1.html

Assessment Tools

Staff knowledge, Risk Identification and Assessment Instruments,

Staff Competency Checklist



STAFF COMPETENCY: DEMENTIA/ALZHEIMER'S CARE

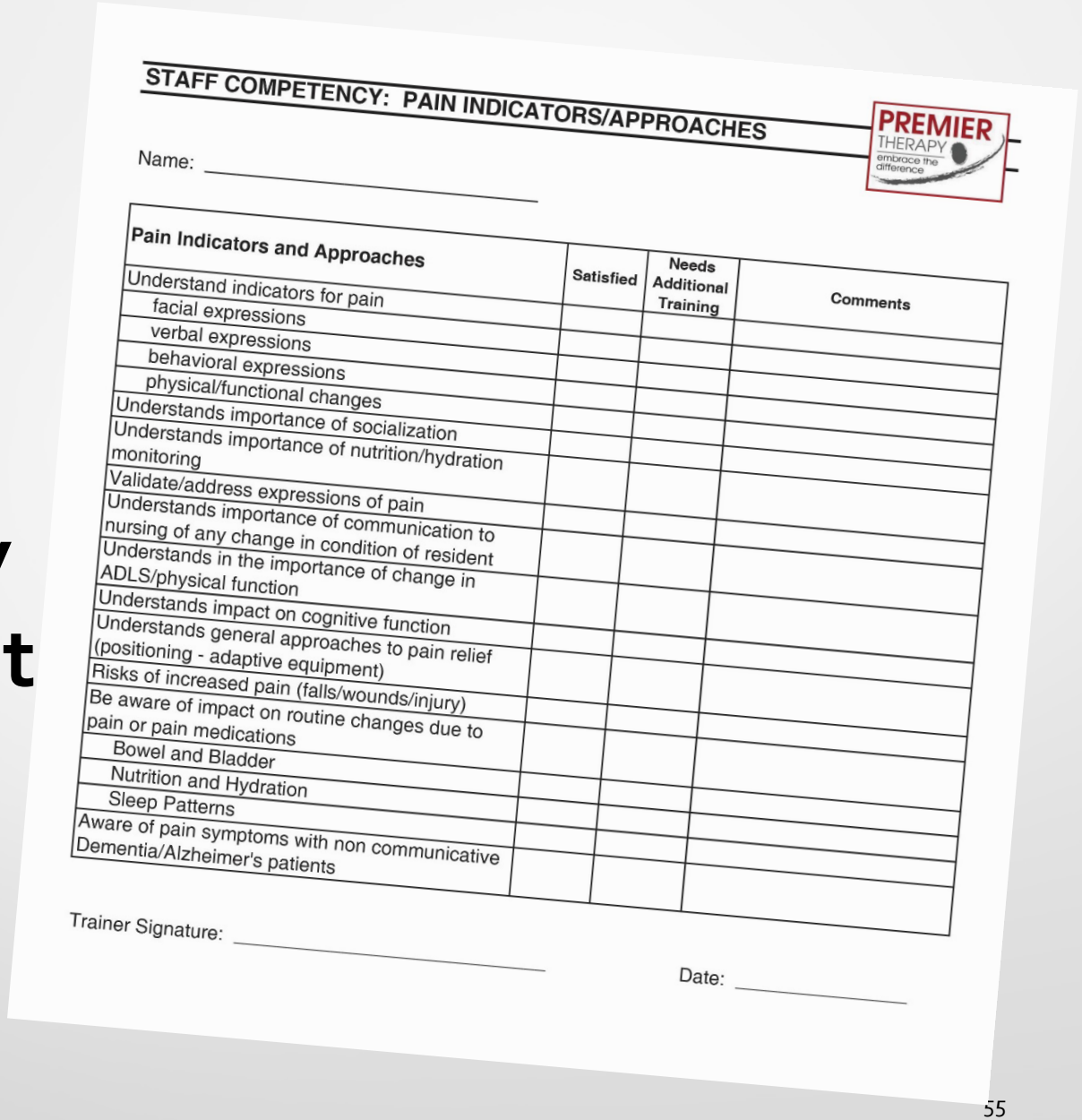
PREMIER THERAPY embrace the difference

Name: _____

	Satisfied	*Needs Additional Training*	*Comments*
Gait belt use			
Approach to treatment			
introduce			
approach from front			
eye contact			
touch			
tone of voice			
Understand indicators for pain			
facial expressions			
verbal expressions			
behavioral expressions			
physical/functional changes			
Understands need for engagement			
Understands importance of nutrition/hydration monitoring			
Understands dignity for patient			
no yelling			
no arguing			
validation of patient			
Understands importance of communication to nursing of any change in condition of resident			
Aware of importance of daily ADLs			
task segmentation			
patient preferences			
environment awareness			
Understands importance of patient preferences			
Understands tools or approaches for patient's wants and needs			
Understands need to keep patient/others safe			
Aware of language references for patients with Dementia/Alzheimer's			
Aware of sleep patterns and bowel and bladder routine			
Aware of impact to patient with regard to changes to routine or environment			
Able to locate patient specific information and use it effectively			
Communicate with dementia residents using focused approach.			

Trainer Signature: _____ Date: _____

Staff Competency Pain Checklist



STAFF COMPETENCY: PAIN INDICATORS/APPROACHES

PREMIER THERAPY embrace the difference

Name: _____

Pain Indicators and Approaches	Satisfied	Needs Additional Training	Comments
Understand indicators for pain			
facial expressions			
verbal expressions			
behavioral expressions			
physical/functional changes			
Understands importance of socialization			
Understands importance of nutrition/hydration monitoring			
Validate/address expressions of pain			
Understands importance of communication to nursing of any change in condition of resident			
Understands in the importance of change in ADLS/physical function			
Understands impact on cognitive function			
Understands general approaches to pain relief (positioning - adaptive equipment)			
Risks of increased pain (falls/wounds/injury)			
Be aware of impact on routine changes due to pain or pain medications			
Bowel and Bladder			
Nutrition and Hydration			
Sleep Patterns			
Aware of pain symptoms with non communicative Dementia/Alzheimer's patients			

Trainer Signature: _____ Date: _____

Why do you get up?

Falls Assessment Starts with a Full History

- Most Report Fall History within 6 Months
  - Need to move beyond just asking this question on your Falls Risk Assessment

Let's review a familiar case.

Who remembers Albert from last fall?

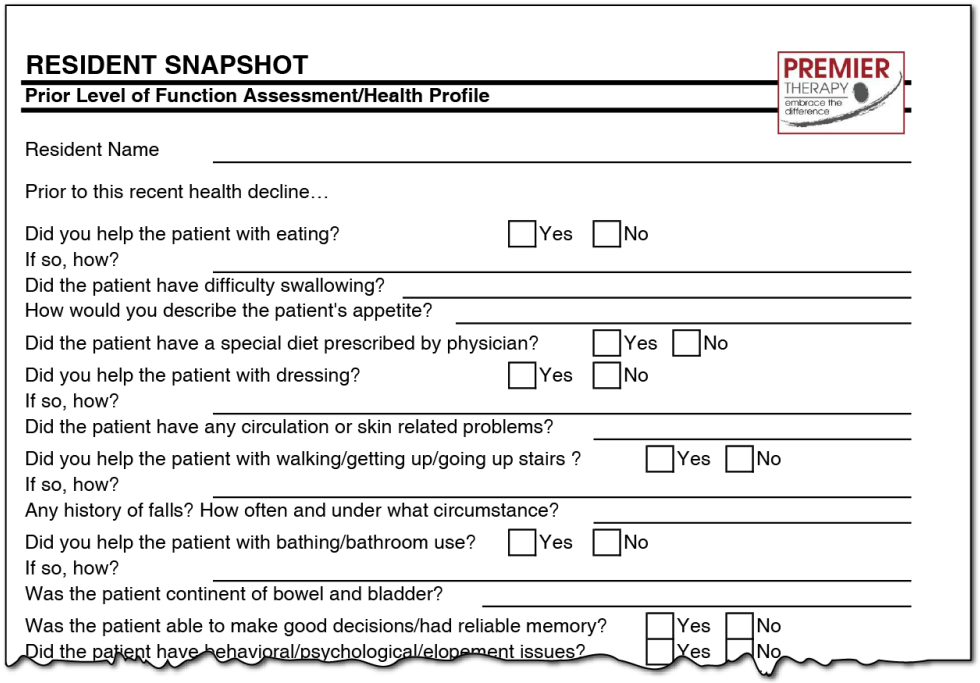
Assessment of Fall Risk

Should include:

- Both patient specific and general facility review
  - History of Falls: circumstance of Fall(s)
  - Risk Factors Present
  - Medication Review
  - Functional Status: Therapy should be involved
  - Environmental Assessment

Full Risk Assessment

When, how, under what circumstance for each noted fall in previous 6 months



RESIDENT SNAPSHOT

Prior Level of Function Assessment/Health Profile

PREMIER THERAPY embrace the difference

Resident Name _____

Prior to this recent health decline…

Did you help the patient with eating? ☐ Yes ☐ No

If so, how? _____

Did the patient have difficulty swallowing? _____

How would you describe the patient's appetite? _____

Did the patient have a special diet prescribed by physician? ☐ Yes ☐ No

Did you help the patient with dressing? ☐ Yes ☐ No

If so, how? _____

Did the patient have any circulation or skin related problems? _____

Did you help the patient with walking/getting up/going up stairs ? ☐ Yes ☐ No

If so, how? _____

Any history of falls? How often and under what circumstance? _____

Did you help the patient with bathing/bathroom use? ☐ Yes ☐ No

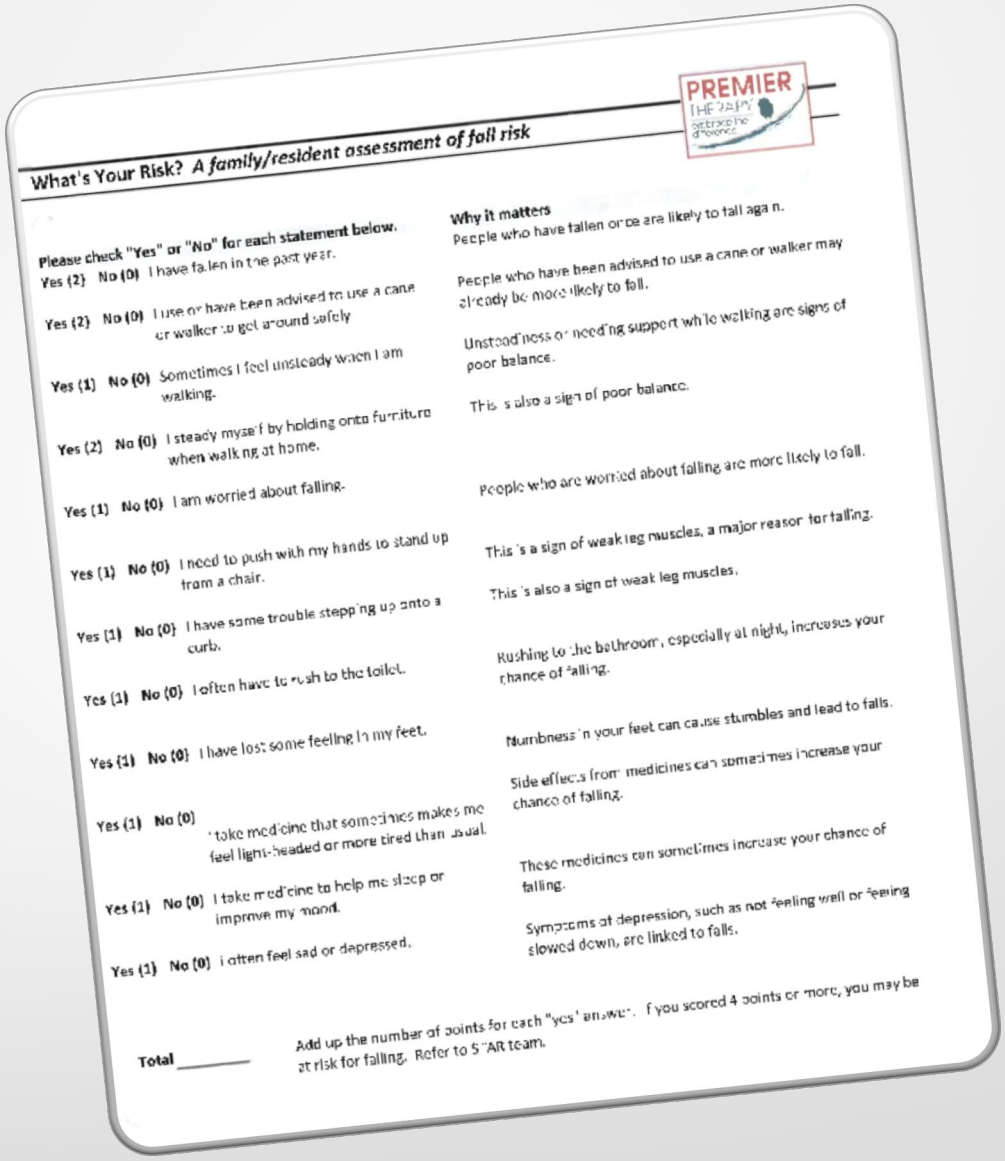
If so, how? _____

Was the patient continent of bowel and bladder? _____

Was the patient able to make good decisions/had reliable memory? ☐ Yes ☐ No

Did the patient have behavioral/psychological/elopement issues? ☐ Yes ☐ No

Include Family And Resident in Determining Risk



What's Your Risk? ***A family/resident assessment of fall risk***

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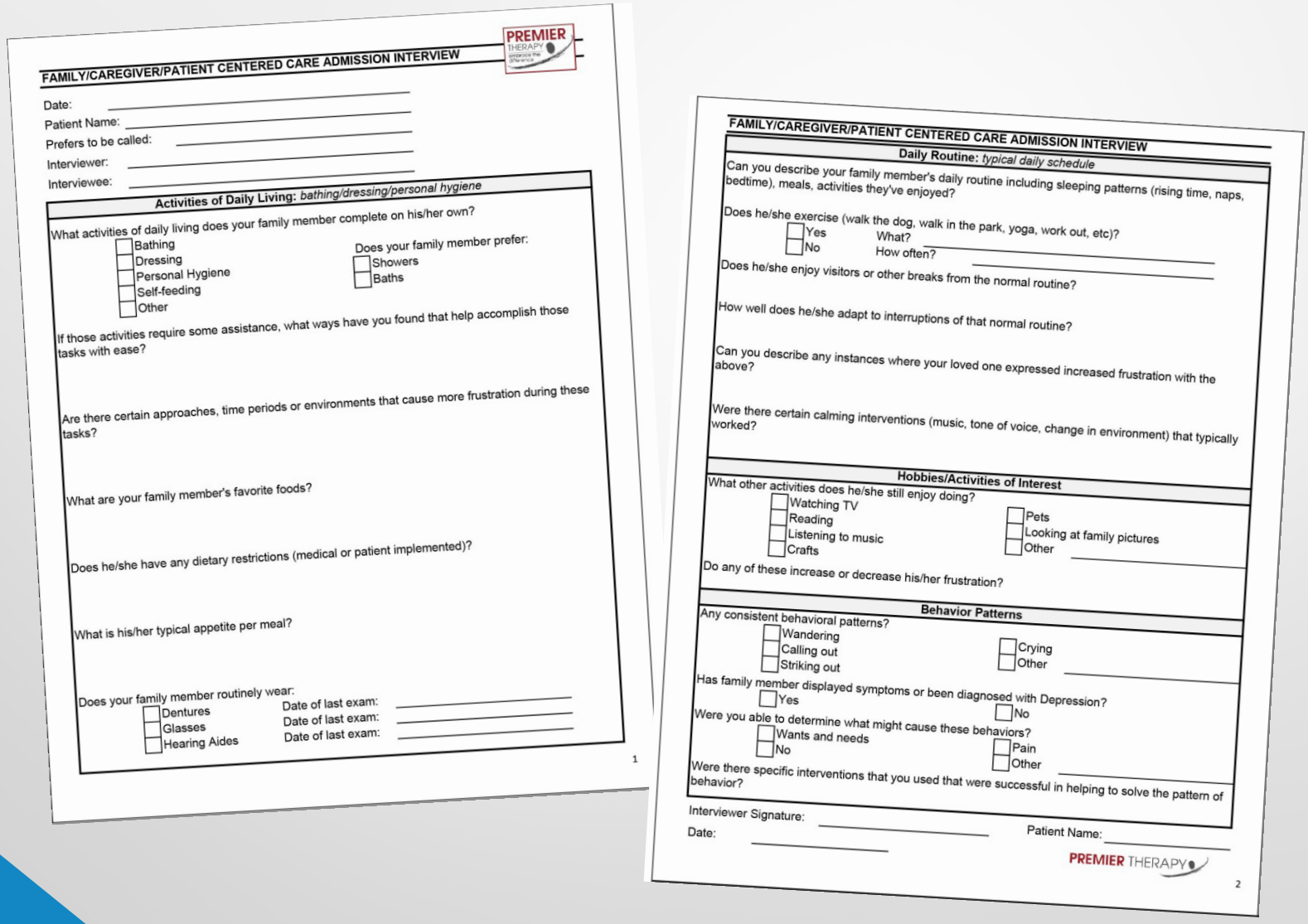
Please check "Yes" or "No" for each statement below.

			Why it matters
Yes (2)	No (0)	I have fallen in the past year.	People who have fallen once are likely to fall again.
Yes (2)	No (0)	I use or have been advised to use a cane or walker to get around safely	People who have been advised to use a cane or walker may already be more likely to fall.
Yes (1)	No (0)	Sometimes I feel unsteady when I am walking.	Unsteadiness or needing support while walking are signs of poor balance.
Yes (2)	No (0)	I steady myself by holding onto furniture when walking at home.	This is also a sign of poor balance.
Yes (1)	No (0)	I am worried about falling.	People who are worried about falling are more likely to fall.
Yes (1)	No (0)	I need to push with my hands to stand up from a chair.	This is a sign of weak leg muscles, a major reason for falling.
Yes (1)	No (0)	I have some trouble stepping up onto a curb.	This is also a sign of weak leg muscles.
Yes (1)	No (0)	I often have to rush to the toilet.	Rushing to the bathroom, especially at night, increases your chance of falling.
Yes (1)	No (0)	I have lost some feeling in my feet.	Numbness in your feet can cause stumbles and lead to falls.
Yes (1)	No (0)	I take medicine that sometimes makes me feel light-headed or more tired than usual.	Side effects from medicines can sometimes increase your chance of falling.
Yes (1)	No (0)	I take medicine to help me sleep or improve my mood.	These medicines can sometimes increase your chance of falling.
Yes (1)	No (0)	I often feel sad or depressed.	Symptoms of depression, such as not feeling well or feeling slowed down, are linked to falls.

Total _____ Add up the number of points for each "yes" answer. If you scored 4 points or more, you may be at risk for falling. Refer to STAR team.

Pre-Admission Survey



FAMILY/CAREGIVER/PATIENT CENTERED CARE ADMISSION INTERVIEW

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Date: _____

Patient Name: _____

Prefers to be called: _____

Interviewer: _____

Interviewee: _____

Activities of Daily Living: *bathing/dressing/personal hygiene*

What activities of daily living does your family member complete on his/her own?

- ☐ Bathing
- ☐ Dressing
- ☐ Personal Hygiene
- ☐ Self-feeding
- ☐ Other

Does your family member prefer:

- ☐ Showers
- ☐ Baths

If those activities require some assistance, what ways have you found that help accomplish those tasks with ease?

Are there certain approaches, time periods or environments that cause more frustration during these tasks?

What are your family member's favorite foods?

Does he/she have any dietary restrictions (medical or patient implemented)?

What is his/her typical appetite per meal?

Does your family member routinely wear:

- ☐ Dentures — Date of last exam: _____
- ☐ Glasses — Date of last exam: _____
- ☐ Hearing Aides — Date of last exam: _____

1

FAMILY/CAREGIVER/PATIENT CENTERED CARE ADMISSION INTERVIEW

Daily Routine: *typical daily schedule*

Can you describe your family member's daily routine including sleeping patterns (rising time, naps, bedtime), meals, activities they've enjoyed?

Does he/she exercise (walk the dog, walk in the park, yoga, work out, etc)?

- ☐ Yes — What? _____
- ☐ No — How often? _____

Does he/she enjoy visitors or other breaks from the normal routine?

How well does he/she adapt to interruptions of that normal routine?

Can you describe any instances where your loved one expressed increased frustration with the above?

Were there certain calming interventions (music, tone of voice, change in environment) that typically worked?

Hobbies/Activities of Interest

What other activities does he/she still enjoy doing?

- ☐ Watching TV
- ☐ Reading
- ☐ Listening to music
- ☐ Crafts
- ☐ Pets
- ☐ Looking at family pictures
- ☐ Other _____

Do any of these increase or decrease his/her frustration?

Behavior Patterns

Any consistent behavioral patterns?

- ☐ Wandering
- ☐ Calling out
- ☐ Striking out
- ☐ Crying
- ☐ Other _____

Has family member displayed symptoms or been diagnosed with Depression?

- ☐ Yes
- ☐ No

Were you able to determine what might cause these behaviors?

- ☐ Wants and needs
- ☐ No
- ☐ Pain
- ☐ Other _____

Were there specific interventions that you used that were successful in helping to solve the pattern of behavior?

Interviewer Signature: _____ Patient Name: _____

Date: _____

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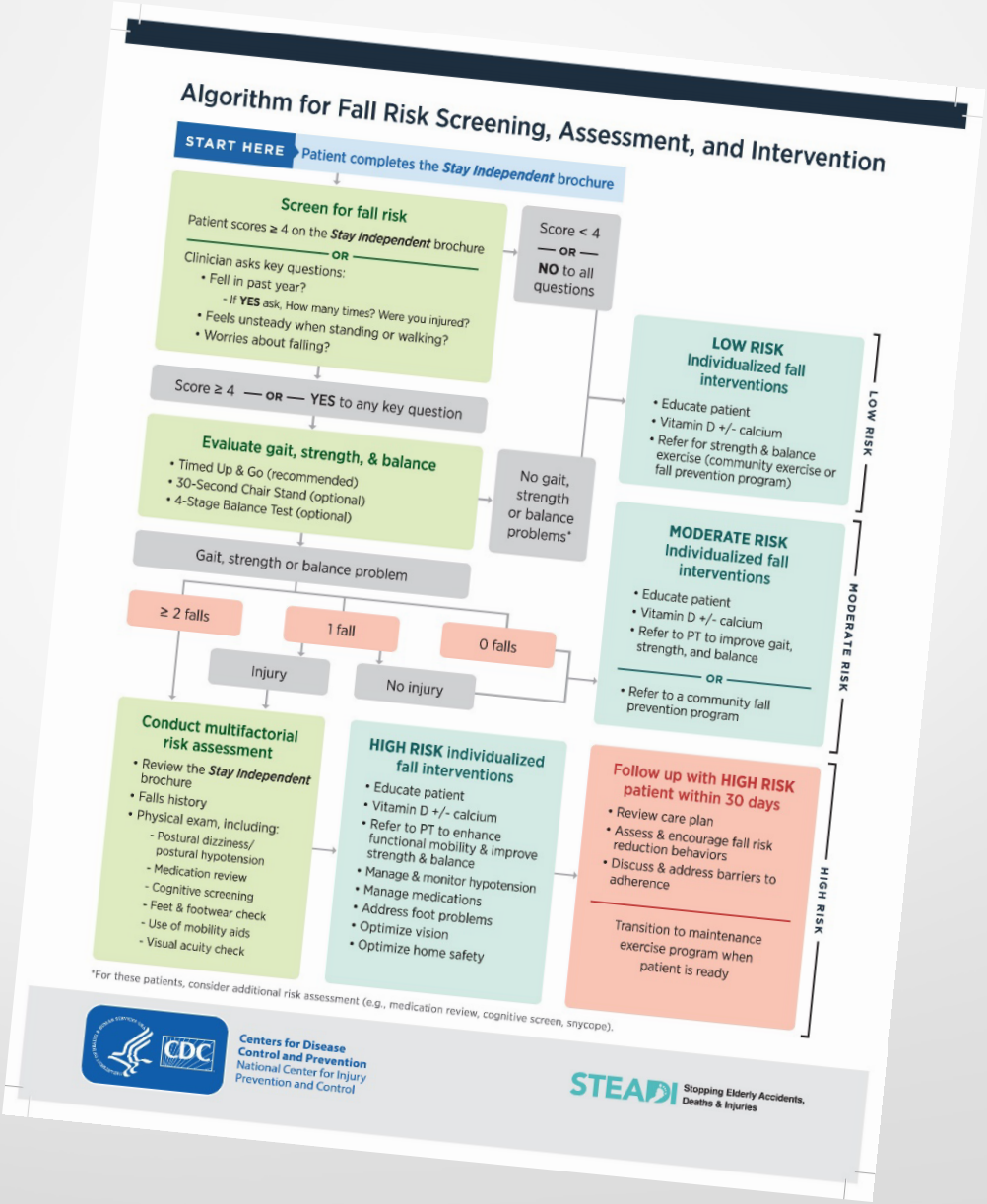
2

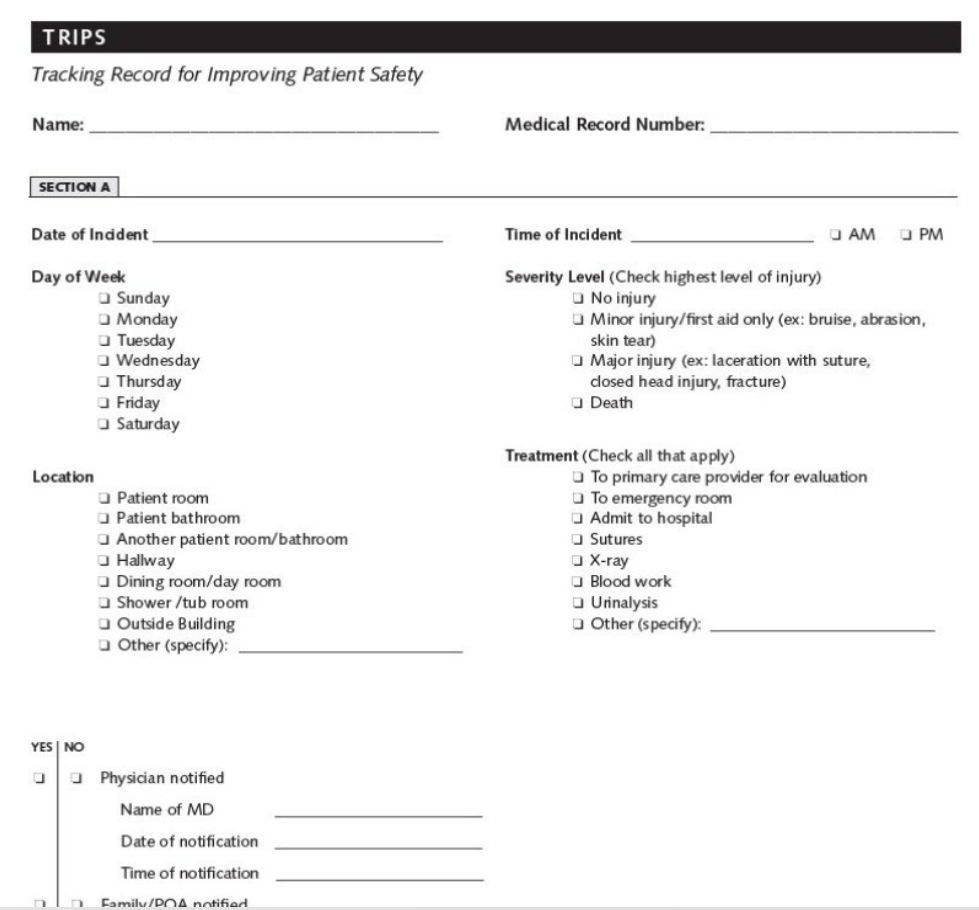
Risk Assessment Tools



[Resource Algorithm for Fall Risk Screening, Assessment, and Intervention (cdc.gov)]

Fall Investigation Tools

Tracking Record for Improving Patient Safety (TRIPS)



TRIPS

Tracking Record for Improving Patient Safety

Name: _____ **Medical Record Number:** _____

SECTION A

Date of Incident _____ **Time of Incident** _____ ❑ AM ❑ PM

Day of Week
- ❑ Sunday
- ❑ Monday
- ❑ Tuesday
- ❑ Wednesday
- ❑ Thursday
- ❑ Friday
- ❑ Saturday

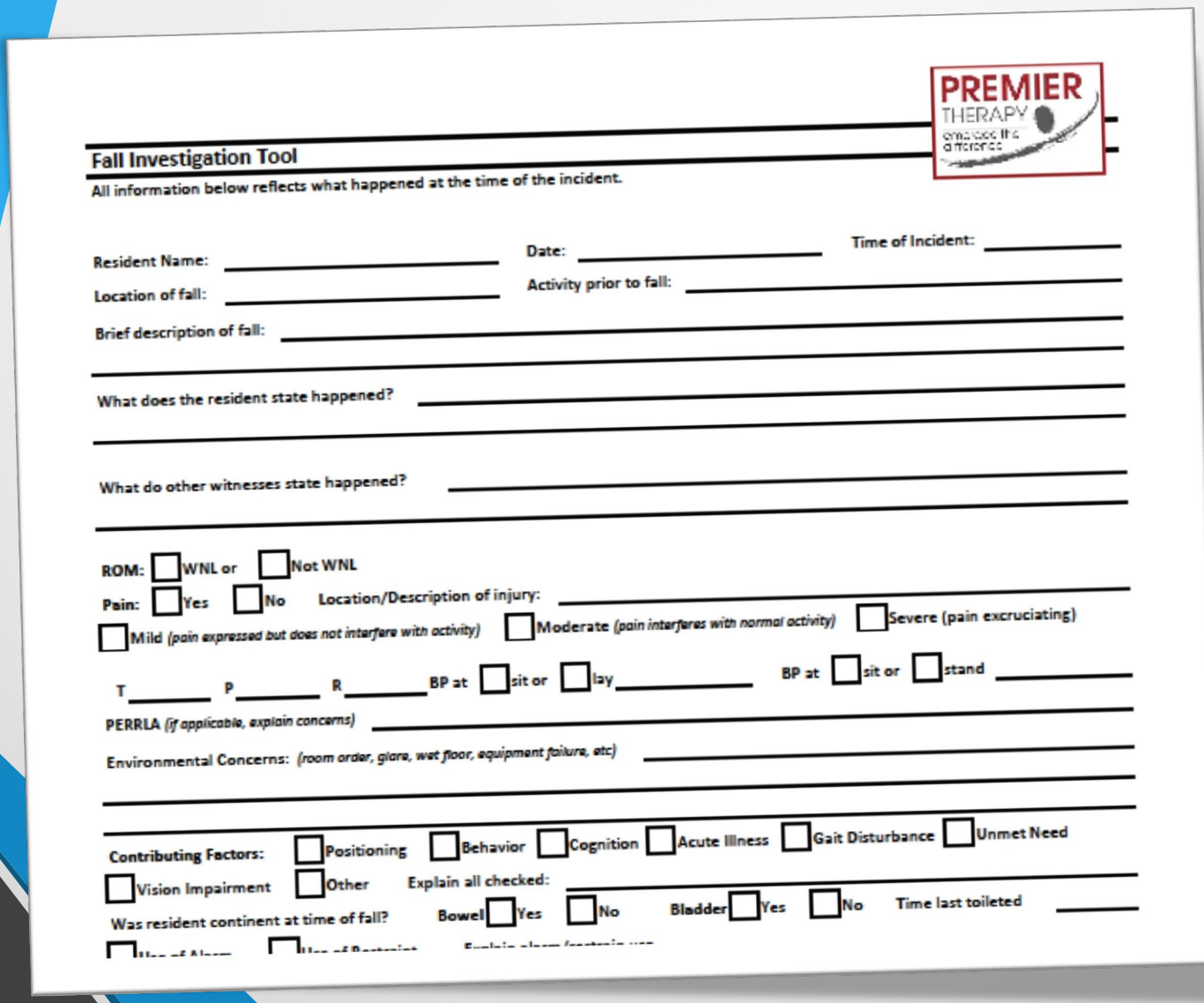
Severity Level (Check highest level of injury)
- ❑ No injury
- ❑ Minor injury/first aid only (ex: bruise, abrasion, skin tear)
- ❑ Major injury (ex: laceration with suture, closed head injury, fracture)
- ❑ Death

Location
- ❑ Patient room
- ❑ Patient bathroom
- ❑ Another patient room/bathroom
- ❑ Hallway
- ❑ Dining room/day room
- ❑ Shower /tub room
- ❑ Outside Building
- ❑ Other (specify): _____

Treatment (Check all that apply)
- ❑ To primary care provider for evaluation
- ❑ To emergency room
- ❑ Admit to hospital
- ❑ Sutures
- ❑ X-ray
- ❑ Blood work
- ❑ Urinalysis
- ❑ Other (specify): _____

YES	NO	
❑	❑	Physician notified
		Name of MD _____
		Date of notification _____
		Time of notification _____
❑	❑	Family/POA notified

https://www.ahrq.gov/patient-safety/settings/long-term-care/resource/injuries/fallspx/manapb-2.html



PREMIER THERAPY

Fall Investigation Tool

All information below reflects what happened at the time of the incident.

Resident Name: _____ Date: _____ Time of Incident: _____

Location of fall: _____ Activity prior to fall: _____

Brief description of fall: _____

What does the resident state happened? _____

What do other witnesses state happened? _____

ROM: ☐ WNL or ☐ Not WNL

Pain: ☐ Yes ☐ No Location/Description of injury: _____

☐ Mild *(pain expressed but does not interfere with activity)* ☐ Moderate *(pain interferes with normal activity)* ☐ Severe (pain excruciating)

T _____ P _____ R _____ BP at ☐ sit or ☐ lay _____ BP at ☐ sit or ☐ stand _____

PERRLA *(if applicable, explain concerns)* _____

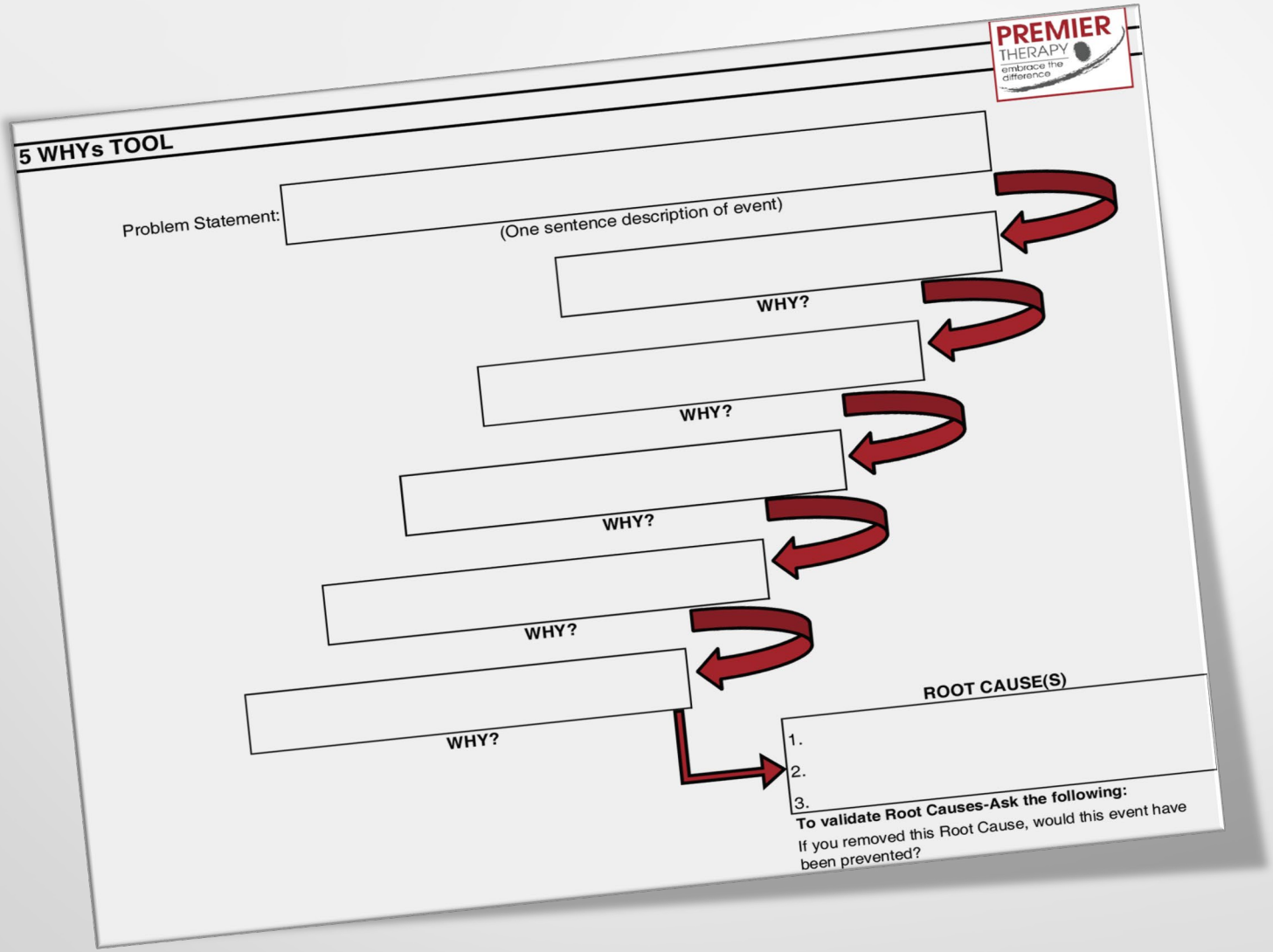
Environmental Concerns: *(room order, glare, wet floor, equipment failure, etc)* _____

Contributing Factors: ☐ Positioning ☐ Behavior ☐ Cognition ☐ Acute Illness ☐ Gait Disturbance ☐ Unmet Need

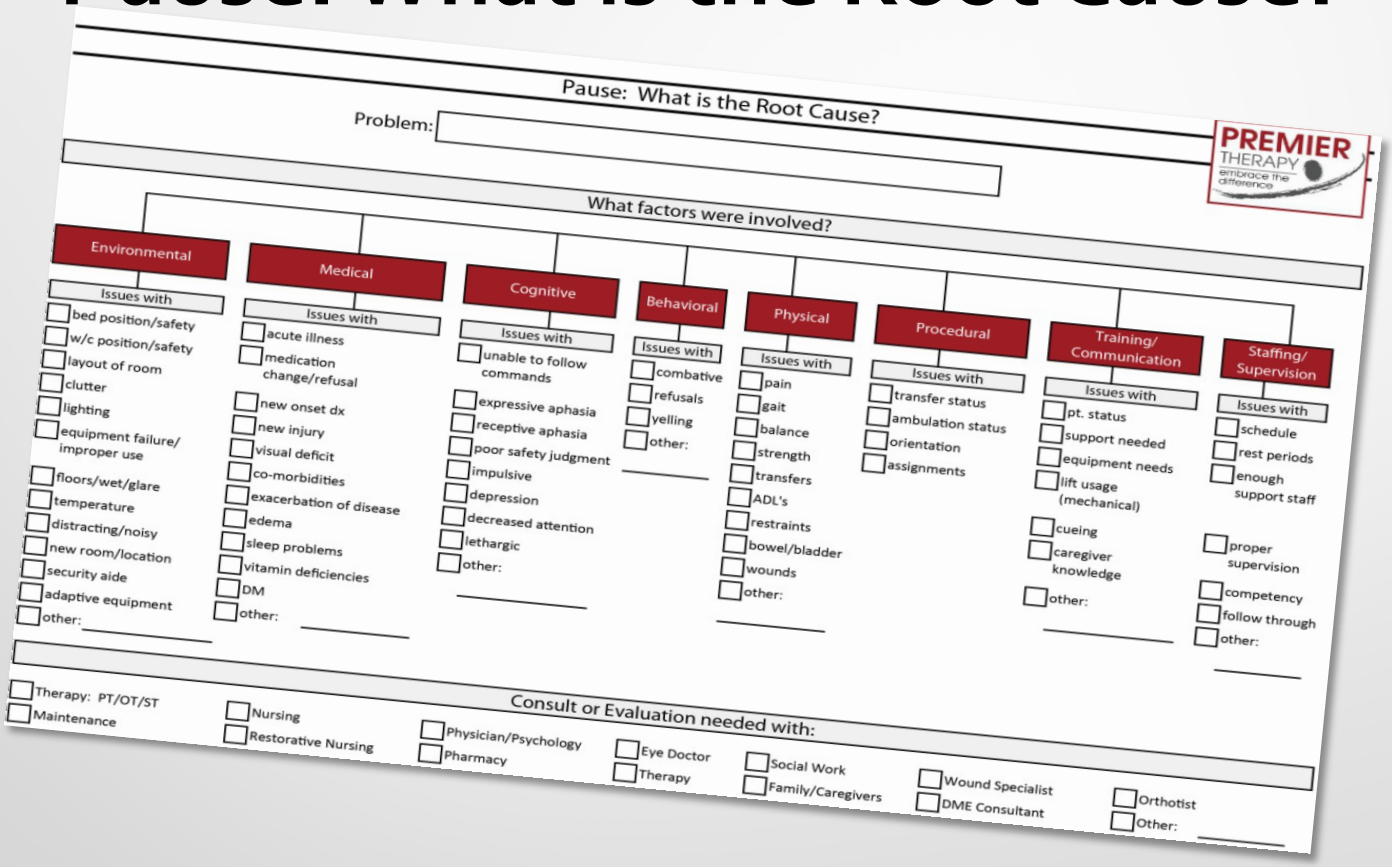
☐ Vision Impairment ☐ Other Explain all checked: _____

Was resident continent at time of fall? Bowel ☐ Yes ☐ No Bladder ☐ Yes ☐ No Time last toileted _____

☐ Use of Alarm ☐ Use of Restraint Explain alarm/restraint use


PREMIER
THERAPY
embrace the difference
5 WHYs TOOL
Problem Statement:
(One sentence description of event)
WHY?
WHY?
WHY?
WHY?
WHY?
ROOT CAUSE(S)
1.
2.
3.
To validate Root Causes-Ask the following:
If you removed this Root Cause, would this event have been prevented?

Pause: What is the Root Cause?



Pause: What is the Root Cause?

Problem:

PREMIER THERAPY embrace the difference

What factors were involved?

Environmental

Issues with
- bed position/safety
- w/c position/safety
- layout of room
- clutter
- lighting
- equipment failure/ improper use
- floors/wet/glare
- temperature
- distracting/noisy
- new room/location
- security aide
- adaptive equipment
- other:

Medical

Issues with
- acute illness
- medication change/refusal
- new onset dx
- new injury
- visual deficit
- co-morbidities
- exacerbation of disease
- edema
- sleep problems
- vitamin deficiencies
- DM
- other:

Cognitive

Issues with
- unable to follow commands
- expressive aphasia
- receptive aphasia
- poor safety judgment
- impulsive
- depression
- decreased attention
- lethargic
- other:

Behavioral

Issues with
- combative
- refusals
- yelling
- other:

Physical

Issues with
- pain
- gait
- balance
- strength
- transfers
- ADL's
- restraints
- bowel/bladder
- wounds
- other:

Procedural

Issues with
- transfer status
- ambulation status
- orientation
- assignments

Training/ Communication

Issues with
- pt. status
- support needed
- equipment needs
- lift usage (mechanical)
- cueing
- caregiver knowledge
- other:

Staffing/ Supervision

Issues with
- schedule
- rest periods
- enough support staff
- proper supervision
- competency
- follow through
- other:

Consult or Evaluation needed with:
- Therapy: PT/OT/ST
- Maintenance
- Nursing
- Restorative Nursing
- Physician/Psychology
- Pharmacy
- Eye Doctor
- Therapy
- Social Work
- Family/Caregivers
- Wound Specialist
- DME Consultant
- Orthotist
- Other:

Most Effective Approach Multifactorial vs. Multicomponent

The *multifactorial approach* recognizes that several factors contribute to why the elderly are at risk for falls, so the prescription is highly varied and individualized to the patient. Individuals are provided with two or more interventions based on the target risk factors associated with the risk of falls. For example, based on risk factors, one person might be prescribed exercise and environmental modification, while another person receives exercise and managing foot and footwear problems.

Improving practice to reduce falls in the nursing home - American Nurse - (myamericannurse.com)

Most Effective Approach Multifactorial vs. Multicomponent

In the *multi-component approach*, the older adult receives a two or more fixed prescribed regimen for falls. For example, exercise + vitamin D supplementation, managing arrhythmia + managing postural hypotension + medications, treating vision and hearing impairment + performing the environmental modification are strategies to a multi-component approach. The multi-component is a grouped approach to a common risk identified.

"Universal" Precautions Approach

- Safe physical environment contributes to fall prevention
- Focuses on CNA and Maintenance assignments to evaluate, notify, and correct potential environmental hazards

https://www.medscape.org/viewarticle/504373_2

Recent Research

Thapa, Et al.: Predicting Falls in LTC: Machine Learning Study

Background: Short-term fall prediction models that use EHRs may enable the implementation of care practices that specifically address changes in individualized fall risk within SNFs.

Conclusions: This study shows that the Extreme Gradient Boosting technique can use features from EHR data to make short-term fall predictions with a better performance than that of conventional fall risk assessments and other ML models. The number of active medications was the most significant feature associated with fall risk, followed by a resident's number of active diseases and several variables associated with vital signs, including diastolic blood pressure and changes in weight and respiratory rates. The combination of vital signs with traditional risk factors as input features achieved higher prediction accuracy than using either group of features alone.

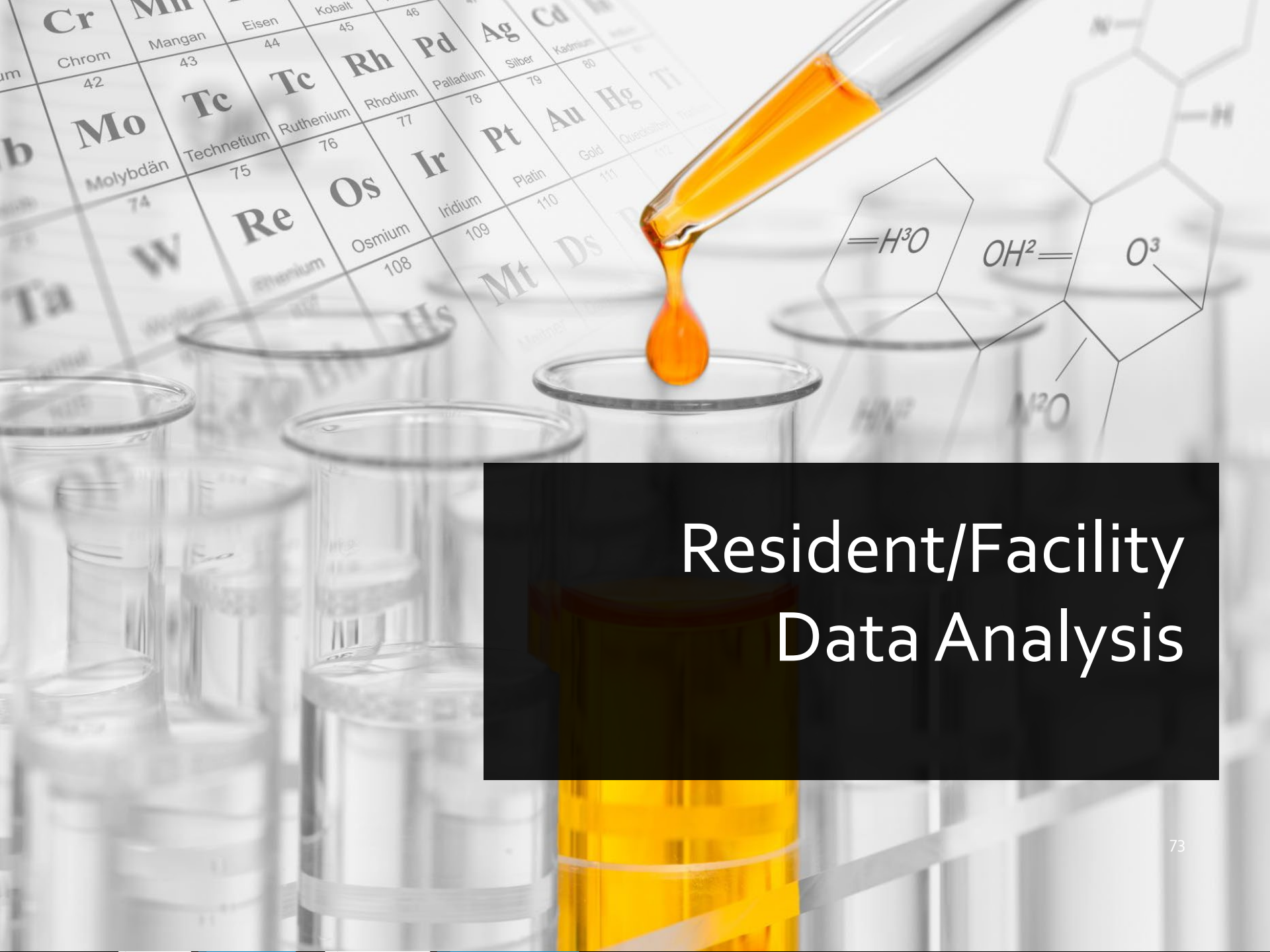
Thapa R, Garikipati A, Shokouhi S, et al. Predicting Falls in Long-term Care Facilities: Machine Learning Study. *JMIR Aging*. 2022;5(2):e35373. Published 2022 Apr 1. doi:10.2196/35373

Recent Research

Duprey, et al. Development and validation of the fall-related injury risk in nursing homes.

- The **INJURE-NH tool** developed by the nine-member academic team can be used to enhance clinical care through automated model calculations based on data from the MDS. However, the study noted that many facilities have “limited” IT infrastructure, making it “preferable” for CMS to modify resident assessments to allow automated calculations.
- The “core predictors” that caregiving teams can use to predict patients at higher risk of falls are gender, age, visual impairment, cognitive impairment as measured by the Cognitive Function Scale, ADLs, orthostatic hypotension, diabetes, history of hip fracture and recent falls.

Duprey, MS, Zullo, AR, Gouskova, NA, et al. Development and validation of the fall-related injury risk in nursing homes (INJURE-NH) prediction tool. J Am Geriatr Soc. 2023; 1- 10. doi:10.1111/jgs.18277



Resident/Facility Data Analysis

Measurement Systems

Key Indicators of Improvement

- Number of falls per month
- Number of residents per month
- Number of residents with 2 or more falls per month
- Number of falls with serious injury

Other Important Markers

- Family and Resident Satisfaction
- Number of survey tags related to falls
- Number of lawsuits related to falls
- Changes in staff awareness
- Changes in staff organization

Accurate Data?

Falls incident report completed timely and contain all details?

Must capture trends on root cause, shift, day, assigned staff member

Data Shared In Ways to Bolster Safety Efforts?

- Is data shared with all staff?
- Where is it shared?
- What data is shared?
- Trends shared with interventions?

Case Scenario

80-year-old female admitted with exacerbation of COPD. Currently Min assist with ambulation

- Past Medical History:
  - Lewy Body Dementia
  - DM
  - Atrial Fib
  - Right hip fracture 2 years ago

Case Scenario *(continued)*

- Prior to hospital stay the resident ambulating without a device throughout the unit. Alert and oriented to self only, no behaviors
- She has a documented fall about 1 week before going into the hospital – pt found in hallway, no injuries
- She has numbness in her feet from DM

Questions?

Thank You

Questions?

Please feel free to contact:

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jbellucci@embracepremier.com

Resources

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2. Tools to Implement the Otago Exercise Program: A Program to Reduce Falls 1st Edition, CDC. Accessed October 2018
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