

## EVENTS RELATED TO RESIDENT CARE

### Prevent fall or other trauma with injury related to resident care

#### Foundational and Ongoing Education Topics to Consider

- Provide education for nurses on how to complete a fall risk assessment (screening and comprehensive), and develop an individualized care plan based on the assessment.
- Provide education for nurses and IDT members on how to respond to and investigate a fall, to identify a root cause, and how to complete an incident report.
- Provide education for all staff on how to promote a safe environment for safe mobility.
- Provide training for staff that assist resident's with ambulating and transferring on the use of transfer methods and equipment, such as gait belts and mechanical lifts.
- Provide training for staff on mobility and exercise programs to help promote balance, strength, and endurance.
- Provide training for all staff on how to monitor resident rooms and common spaces for potential trip hazards.
- Provide training for nurses, therapists, and all staff that take blood pressures on how to measure blood pressures and how to take an orthostatic blood pressure, if ordered.

#### Pre-Admission Practices

- Obtain the resident's fall history from the resident, family, hospital, or other setting prior to admission (e.g., what caused the fall(s), when and where they happened, how they happened, and any prevention techniques used).
- Review medications that could contribute to falls (including newly started medications that have the potential to contribute to fall such as blood pressure medications, psychotropic medications, opioids, diabetic agents, and diuretics).
  - o Review medications with physician/practitioner and consulting pharmacist, as needed.
- Ask the resident and family members for information that may be related to fall risk.
  - o Side of the bed the resident normally exits from
  - o Assistive devices used (e.g., for walking, vision, or hearing)
  - o Bowel and bladder patterns
- Configure the room to promote safe mobility.
  - o Appropriate placement of the bed for the side of the bed they are used to exiting from
  - o Assistive devices available and in place
  - o Ensure resident and/or family bring proper footwear
- Identify the type of therapy the resident is currently receiving, response to therapy, ability to ambulate and transfer, and mobility concerns or restrictions.
- Identify the last time pain medication was received by resident and plan to have appropriate medication available for resident on arrival to the nursing home.

#### Admission Practices

- Assess the resident for a fall risk, including history of falls, and use a validated fall risk tool (e.g., Morse Fall Scale) and a comprehensive assessment.
- Identify and assess the need for medications that can increase the resident's risk of falling.
- Obtain assessment of resident's vision, as well as need for assistive devices such as glasses or additional lighting.
- Obtain assessment of resident's hearing.
- Obtain postural assessment in order to determine need for any specific interventions, or highlight potential risks based on postural deficits.

- Orient resident to room and bathroom and ensure resident's room is set up for safe bed exit and clear access to the bathroom, ensuring the resident can easily turn lights on when needed.
- Talk with the resident about the use and location of the call light, and assess their capacity to use the call light.
- Conduct a bowel and bladder three-day observation/diary, and then evaluate the need to continue the diary to establish incontinence and elimination patterns.
- Establish a process to identify individualized interventions that address the resident's specific risk factors for falling (and that reflect the resident's values and preferences), and document those in a care plan, and update the nurse assistant assignment sheet.
- Consider individualized interventions, such as:
  - Individualize bed height to provide for proper exit/egress for the resident, and support their mobility.
  - Anticipate and plan for providing assistance to the bathroom per their individualized schedule.
  - Support the resident in using nonskid footwear when indicated (nonskid footwear should not be used in residents with a shuffling gait).
  - Consider use of hip protectors for residents with clinical conditions, such as osteoporosis, which make them at higher risk for fracture.
  - Use a gait belt when indicated.
  - Have all equipment that the resident needs readily available at all times (e.g., cane, walker, or wheelchair).
- Begin initiation of hourly rounds, including checks on the 4 Ps (Pain, Potty, Positioning, Possessions). Consider more frequent checks during the first 24 hours (e.g., every 15 minutes).
- Establish a process to communicate the risk of falls and interventions with the resident/patient, family, and all members of the care team, such as:
  - At daily stand up/IDT meeting, review new resident's fall risk and interventions.
  - Add residents with fall risk to the 24-hour report and ensure it is reviewed with all staff at shift change (appropriate staff and IDT team members should review 24-hour reports back to the last day worked in order to ensure they are aware of changes).
  - Establish a process to alert staff of any vision deficits along with recommendations of how to best accommodate for these deficits (e.g., verbal cueing, etc.).
  - Establish a process to alert staff to hearing deficits along with how to best accommodate (e.g., use of hearing aids or other personal amplification device).

### Ongoing Care Practices and Monitoring

#### *Proactive observation and monitoring*

- Conduct hourly rounds, including checks on the 4 Ps (Pain, Potty, Positioning, and Possession).
- Staff conduct 'safety scan' prior to leaving resident rooms to ensure needed items are within reach and that the environment is free of fall hazards (e.g., equipment, cords, spills, clutter).
- Establish the expectation that all staff should scan resident rooms as they are walking up and down hallways, looking for signs that the resident may need something and that the environment is free of fall hazards. "Safety is everyone's responsibility."
- Establish a process to re-assess a resident's fall risk when there is a change in their condition.
- Conduct a bowel and bladder three-day observation diary following a change in medication. Evaluate the need to continue the diary in order to be proactive in identifying the impact of medication changes that might contribute to increased fall risk.
- Assign a department head to the new resident to visit the resident and check the resident's room on a daily basis (e.g., asking the resident if they are in any pain, if their needs are being met, and looking for environmental/safety hazards, ensuring proper footwear and mobility devices are in place).

### *Therapy and restorative programs*

- Support resident mobility through physical therapy (PT) and occupational therapy (OT).
- Therapists take vital signs before and after therapy for those at risk of hypotension.
- Therapists provide education and demonstration to staff on how to transfer or position residents and equipment, and consider using pictures to show correct positioning.
- Therapists meet with families to provide education on safe mobility and transfers.
- Therapists monitor residents in halls/bedrooms to double check positioning and equipment use.
- Create a formalized program for restorative assistants with a dedicated mentor. Assign dedicated assistants to support residents in restorative exercises and ambulation.
- Therapists conduct home assessment prior to discharge to promote a safe environment and to assist with obtaining proper equipment for home use.

### *Activities, nutrition, sleep, and pain management*

- Provide meaningful, timely, and ample group and individualized activities so that residents are not bored, lonely, or isolated in their rooms for long periods and thus, less likely to be observed by staff so may be more likely to fall in their room.
- Include exercise, ambulation in activities (e.g., yoga, tai chi, ball throwing, walks, or dance).
- Establish a process to assess and follow up on resident's nutritional status and weight on admission and ongoing.
- Implement 'sleep well' program. Identify what each resident needs to sleep well (to promote rest, healing, and strength) and strive to make sure those needs are met. Consider nonpharmacological interventions (e.g., aromatherapy, lighting, soothing noise only, bedding, light massage, pre-bedtime routine).
- Assess resident's pain status and manage pain in order to maintain strength and promote mobility and successful therapy. Assess verbal and nonverbal expressions that are potential manifestations of pain. Recognize that changes in facial expression, restlessness, and agitation may be signs of discomfort.
- Consider physiatrist consultation and services especially if serving people with post-stroke recovery and head injury rehabilitation needs.

### *Post fall practices*

- Establish processes to assess and respond immediately after a resident fall, to identify and mitigate injury, and to institute proper notifications (e.g., to family, provider, therapist, etc.).
- Establish processes for the IDT to conduct post fall assessments through huddles or other mechanisms so that the IDT can assess, with the resident and family, the cause of the fall.
- Include resident, family, and IDT in identifying strong interventions for preventing future falls. Strong interventions do not rely solely on staff memory to carry out correctly, they include a forcing function to increase the likelihood of being completed as intended.
- Update plan of care and nursing assistant assignment sheets with any new risk factors and interventions.
- At daily stand up/IDT meeting, review resident's new risk assessment findings, interventions, and care plan updates.
- Add information about the resident's fall and new interventions to the 24-hour report, and ensure the information is reviewed with all staff at shift change (appropriate staff and IDT team members should review 24-hour reports back to the last day worked, to ensure they are aware of changes).
- Use standing meeting (e.g., IDT huddle) to review all occurrences, including falls, in the past 24 hours for awareness and input.

*Environment*

- Establish processes to ensure environmental and equipment safety (e.g., flooring, doors, beds, grab bars, lifts, wheel chairs, walkers, shower chairs) to avoid trip hazards or other hazards that can cause injury.
- Provide visual cues to staff for residents that are not to be left alone in the bathroom.
- Implement daily or twice daily leader rounds that assess resident condition, needs, issues, requests, and environmental checks.
  - o Use safety checklists for the environment and equipment to help leaders and staff conducting the checks to be thorough in their assessments.
  - o Establish a process for reporting and follow-up on any gaps identified.
- Use standardized equipment and supplies to promote staff familiarity (e.g., lifts, tubs, shower chairs).
- Use signs to remind resident and family to call for help - “Stop, don’t fall, call!”
- Consider use of floor or wall signage that alerts staff to where to place the resident’s supportive devices such as wheelchairs, so they are in the proper place for resident access and use (e.g., use markings on the floor to indicate wheel chair or walker ‘parking lot’ location).
- Use a marker, such as an arrow on the wall, to indicate appropriate bed height for the resident.
- Establish a process where all staff can report environment or equipment repair or cleaning needs, calling for urgent needs, or entering non-urgent needs in an electronic or paper log, and maintenance staff checks and prioritizes actions needed, and follow up promptly.
- Manage tight spaces such as activity or dining rooms, so that traffic with wheel chairs and walkers is safe.
- Pay close attention to lighting to ensure adequate lighting in order to prevent trips or falls.
- Pay close attention to flooring with regard to safety:
  - o Avoid high gloss wax that causes glare on floors.
  - o Pay close attention to flooring surfaces and transitions between flooring materials to ensure smooth ambulation or wheeling.
  - o Install flooring that may provide a cushion that can mitigate injury if a person falls.
  - o Use cleaning and wax products that have nonskid properties.
  - o Establish floor mopping processes that do not leave large areas of the floor wet at any one time, and use appropriate signage to indicate wet floors.
- Select and provide chairs in bedrooms and common areas that support good posture and body mechanics.
- Implement noise reduction strategies, such as noiseless call light systems, reduce or eliminate overhead paging and elevator ‘dings,’ use flooring that absorbs sound, assess alarm use and impact, and ask staff to be mindful of reducing noise to help reduce stress, confusion, chaotic environments.
- Make modifications to common areas that have heat/electrical equipment or furnishings to ensure safety (e.g., think about what safety modifications are needed in order for residents/families to use a coffee maker or a fireplace in the lobby).
- Identify risks related to equipment use, such as tubing from intermittent pneumatic compression (IPC) devices, and discuss with the resident and family to minimize risks of tripping.

*Staff safety*

- Provide easy access to gait belts.
- Track all staff injuries/accidents or near misses that impacted or could impact resident safety (e.g., staff falls, injuries related to resident handling). “If our staff fall or are injured while supporting a resident, then the resident may also get hurt.”
- Provide education for staff on safe resident/patient handling.
- Identify opportunities to improve staff safety, such as education on footwear for staff (shoes that are not a trip or slip hazard).
- Provide education for staff on prevention of workplace violence (including resident to staff aggression), focusing on protecting themselves, de-escalation, and how to get help immediately.

**Resources to Consider**

- Beers Criteria for Potentially Inappropriate Medication Use in Older Adults - <https://www.americangeriatrics.org/publications-tools>, and click on Updated AGS Beers Criteria.
- AHRQ, The Falls Management Program: A Quality Improvement Initiative for Nursing Facilities - <https://www.ahrq.gov/professionals/systems/long-term-care/resources/injuries/fallspx/index.html>
- CDC, Important Facts About Falls - <https://www.cdc.gov/homeandrecreationalafety/falls/adultfalls.html>
- CDC, The National Institute for Occupational Safety and Health – Safe Patient Handling and mobility - <https://www.cdc.gov/niosh/topics/safepatient/default.html>
- The Society for Post-Acute and Long-Term Care Medicine, Falls and Fall Risk Clinical Practice Guide - <https://paltc.org/product-store/falls-and-fall-risk-cpg>
- Pioneer Network, Promoting Mobility, Reducing Falls and Alarms: Tip Sheet - <https://www.pioneernetwork.net/wp-content/uploads/2016/10/Promoting-Mobility-Reducing-Falls-and-Alarms-Tip-Sheet.pdf>
- National Nursing Home Quality Improvement Campaign, Resources to promote mobility - <https://www.nhqualitycampaign.org/goalDetail.aspx?g=mob#tab4>
- Morse Fall Risk Assessment Tool - <https://www.ahrq.gov/professionals/systems/hospital/fallpxtoolkit/fallpxtk-tool3h.html>
- CMS, LTC Survey Pathway, Accidents - <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes.html>
- CMS, LTC Survey Pathway, Environment - <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes.html>
- See [Appendix D](#) for suggestions on team members in your organization to include in quality improvement efforts for this topic.

**Prevent pressure and other skin injury such as skin tears****Foundational and Ongoing Education Topics to Consider**

- Identify and train one or more nurse(s) to become “Wound Care Certified.”
- Educate all staff on prevention of skin breakdown and pressure injuries.
- Educate nurses on:
  - o Pressure injury skin risk assessment and development of a care plan based on risk assessment
  - o Assessment, staging, and documentation of pressure injuries
  - o Topical treatment modalities for pressure injuries
  - o Assessment and treatment of lower extremity ulcers (arterial, venous, and peripheral neuropathy/diabetic)
- Ensure staff competencies in skin care to prevent pressure injuries and other injuries, such as skin tears, and in wound assessment and management.
- Train appropriate staff to monitor equipment used to reduce or relieve pressure (e.g., monitor that powered support surfaces are properly inflated, proper heel lifts are in place, and wheelchair cushion or devices are correctly in place).

**Pre-Admission Practices**

- Identify the status of the resident's skin and risk for skin breakdown.
- Review all current treatments the resident is receiving to identify possible skin integrity issues not known by transferring organization.
- If the resident has skin integrity issues or pressure injuries, determine needs for:
  - o Pressure redistribution in the bed
  - o Pressure redistribution in the chair
  - o Heel lift
  - o Turning/repositioning programs
  - o Incontinence management
  - o Nutritional support or supplementation
- Obtain from resident/family history of skin breakdown/pressure injuries, preventive and treatment interventions used in the past, and their results.
- Obtain the proper treatment supplies and equipment prior to the resident's admission.

**Admission Practices**

- Perform skin inspection on admission.
- Conduct comprehensive skin risk assessment.
- Develop an individualized skin integrity care plan based on the resident's skin and risk assessments.
- Document all skin integrity interventions on the nursing assistant's assignment sheet.
- Discuss skin integrity risks, and review the plan of care with the resident/family so that they know what to expect and can help monitor consistent implementation of the plan of care.

**Ongoing Care Practices and Monitoring**

- Conduct daily skin inspection by nursing assistants, bathing assistants.
- Conduct weekly skin inspection by nursing.
- Conduct weekly wound rounds to discuss residents with pressure injuries and skin integrity concerns. To support learning and staff back-up, consider having the unit/floor nurse and nurse manager round weekly with the wound nurse to be aware of current wound status, treatment/goals, and progress of wound healing.
- Include Director of Nursing, staff development leader, and other leaders as appropriate in wound rounds. Watch for progress in healing, risks to healing, plan, timeline, and supply/equipment needs to promote healing and staff education needs.
- Complete skin risk assessment weekly for the first four weeks after admission, then monthly and with a change of resident condition.
- Communicate risk assessment results, skin checks, and interventions to the nurses, nursing assistants, IDT members, residents, and families.

- Implement a plan for skin integrity to include, per individualized assessment, as appropriate:
  - o Support surfaces (bed and wheel chair).
  - o Resident preferred beverages offered regularly to maintain hydration.
  - o Resident preferred food choices and assistance with eating when needed.
  - o Help for the resident to be as mobile and active as possible.
  - o Clean and dry skin.
  - o Bathing per resident preference.
  - o Incontinence care if needed.
  - o Moisturizing of skin daily with appropriate non-irritating lotions to prevent skin tears.
  - o Application of skin sealants to skin and/or dressings to protect from friction and shear.
  - o Use of barrier creams to prevent moisture-associated skin damage.
  - o The option of wearing long sleeves or garments to protect from skin tears.
  - o Individualized turning and repositioning schedules.
  - o Appropriate lifting techniques and devices used when assisting residents to move to minimize shearing forces.
  - o Heels elevated off bed.
  - o Involve dietary and therapy staff before any issues arise.
- Ensure staff monitor equipment, such as powered support surfaces properly inflated, proper heel lift, and wheelchair cushion in place.
  - o Ensure that support surfaces are in good condition, and that a replacement schedule in line with manufacturer guidelines is in place and followed.
- Monitor/audit that residents are being assisted with turning and repositioning as planned.
- Monitor/audit nurses performing dressing changes for proper technique and infection control.
- Monitor/audit monthly or as appropriate:
  - o Treatment administration record for proper transcription of treatment and completion of treatments by nurses.
  - o Care plans and nursing assistant assignment sheets are up to date and being followed.

**Resources to Consider**

- National Pressure Ulcer Advisory Panel (NPUAP), educational and clinical resources - [www.npuap.org](http://www.npuap.org)
- Wound Ostomy and Continence Nurses Society (WOCN), education and publications - [www.wocn.org](http://www.wocn.org)
- CMS, LTC Survey Pathway, Pressure Ulcer/Injury - <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes.html>
- See [Appendix D](#) for suggestions on team members in your organization to include in quality improvement efforts for this topic.

## Prevent exacerbations of preexisting conditions resulting from an omission of care

### Foundational and Ongoing Education Topics to Consider

- Educate staff on diseases and conditions that their residents have and for which they need care (e.g., causes, risks, signs and symptoms, management, prevention).
- Use in-house experts or other community partners such as local hospital nurses and physicians to provide education on specialty care and/or diseases and treatments, tap into specialists to provide staff training (e.g., pharmacist, respiratory therapy).

### Pre-Admission Practices

- Establish processes to review the resident's history, diagnoses and conditions, current treatments and goals, potential treatments, and care needed.

### Admission Practices

- Establish processes to ensure complete and timely medical evaluation and diagnosis that includes prior record review (history, labs, test results, etc.), recognizing that residents may have multiple, complex comorbidities.
- Support provider conversations with the resident and family to help build the complete picture of the resident's condition and care needs. Assist them with setting up a time to meet with the resident and family.
- Ensure a timely and thorough nursing assessment that reviews history, current diagnoses, medications, treatments, test results, psychosocial needs. "Within 24 hours, nursing and the DON conduct a thorough assessment of each resident, ensuring that each applicable department has assessed the resident and contributed to the plan of care."
- Assign clear responsibility and timeline for developing the plan of care within 24 hours. Ensure that the resident and family all disciplines' input is gathered and used.
- Ensure plan of care follows guidelines for monitoring chronic conditions (e.g., monitoring congestive heart failure, anemia, hypo or hyperthyroidism, depression, respiratory disease, kidney disease).
- Review the plan of care with the resident (and family as applicable) so that they know what to expect and can help monitor consistent implementation of the plan of care.

### Ongoing Care Practices and Monitoring

- Implement processes to double check that the following assessments and documents align: Minimum Data Set (MDS), clinical assessments and notes, care plan, medication administration record, treatment administration record, and physician's current orders.
- Implement processes and systems that trigger nursing assistants, nurses, and all staff to a) recognize when care, treatments, medications are due, b) to perform any required assessments prior to delivering care (e.g., vital sign checks, labs) and c) to document the care provided.

- Develop processes and monitor to ensure orders are carried out as intended.
  - Establish process to ensure all steps in the processing of orders are followed (e.g., develop checklist for processing provider orders, including informing the resident and family).
  - Establish processes to double check that all required care and treatment is documented (e.g., audit medication administration record (MAR) and treatment administration record (TAR) each shift, audit nursing assistant care forms to see if required care is checked off).
  - Ask the resident and family if they are receiving the specific types of care which were described to them (what is included in the care plan) during rounding.
  - Conduct observational audits to ensure that care is provided as intended (e.g., monitoring turning and repositioning, toileting programs, weights, injections, blood sugar monitoring, medication pass).
  - Establish processes to ensure follow up on test results. Monitor for receipt of and communication of results to provider and resident/family.
- Perform a root cause analysis on all hospital readmissions and adverse events to determine if:
  - There was a condition not identified by providers or staff and thus not reflected in the care plan and/or treatment decisions (e.g., depression, pain, fall risk).
  - There was a failure to recognize a change in condition that, if recognized earlier, could have been treated (e.g., weight loss or gain, change in vital signs or mobility).
  - There were prolonged delays in care delivery that occurred (e.g., delayed incontinence care or repositioning, delayed notification of attending physician or other practitioner, inadequate assistance with hydration or feeding during meals, pain management).
- Update systems and processes as a result of the root cause analysis and set a timeframe to follow up on the effectiveness of the interventions.

**Resources to Consider**

- Institute for Healthcare Improvement, Skilled Nursing Facility Trigger Tool for Measuring Adverse Events - <http://www.ihi.org/resources/Pages/Tools/SkilledNursingFacilityTriggerTool.aspx>
- See [Appendix D](#) for suggestions on team members in your organization to include in quality improvement efforts for this topic.

**Prevent acute kidney injury or insufficiency secondary to fluid maintenance****Foundational and Ongoing Education Topics to Consider**

- Educate staff on how altered kidney function affects the body, treatment, management, and monitoring needs.
- Educate all staff on the importance of hydration and how to identify residents who are at risk for dehydration (e.g., residents with dysphagia, residents with dementia, residents that need help eating or drinking).
- Train staff to assist residents that need help eating and drinking.
- Ensure nursing competency to assess for signs of dehydration (e.g., dry mucous membranes, reduced sweating, sunken eyes, tachycardia, low blood pressure and postural blood pressure drop, altered consciousness including confusion, increasing functional impairment, weakness, constipation, reduced urine output and more concentrated/darker urine).
- Ensure nursing competency to recognize that the following may contribute to decreased kidney perfusion:
  - Hypovolemia – decreased fluid volume due to conditions such as blood loss, dehydration, GI loss (diarrhea/vomiting).
  - Hypotension – caused by medications or clinical conditions such as heart failure or sepsis.
- Ensure nursing competency around management of ileostomy, to prevent leakages that may lead to dehydration and alteration in electrolyte balance.
- Ensure nursing competency in intravenous (IV) therapy including routine assessment of the IV site to ensure that fluid is being delivered effectively.

**Pre-Admission Practices**

- Identify current kidney status, ability to swallow, fluid management needs, and treatments such as dialysis, ileostomy, or diuresis, that may impact fluid and electrolyte balance.

**Admission Practices**

- Ensure a timely and thorough nursing assessment that reviews history, current diagnoses, medications, treatments, test results, dialysis, or other treatment needs that may impact fluid and electrolyte balance.
- Referral to speech therapy and dietician as appropriate.
- Develop care plan and nursing assistant assignment sheet based on assessment.
- Review the plan of care with the resident (and family as applicable) so that they know what to expect and can help monitor consistent implementation of the plan of care.
- Set up fluid monitoring and tracking system that includes follow up on any significant findings.
- At daily stand up/IDT meeting, review new residents with kidney/fluid needs and interventions.
- Add residents with specific fluid needs and kidney function monitoring (such as urine output or kidney function tests) to the 24-hour report and ensure it is reviewed with all staff at shift change (appropriate staff and IDT team members should review 24-hour reports back to the last day worked in order to ensure they are aware of changes).
- Review the plan of care with the resident (and family as applicable) so that they know what to expect and can help monitor consistent implementation of the plan of care.

**Ongoing Care Practices and Monitoring**

- Evaluate the hydration needs of each resident.
- For residents that are not on a fluid restriction and are not at risk of consuming too high a volume of fluids:
  - Ensure easy access to water and fluids for residents, providing fresh (and cold if that is resident preference) at the bedside, at hydration stations throughout the building, during activities, and throughout the day.
  - Make sure fluids are within residents reach.
  - Provide visual cues to remind residents to drink, and staff and families to prompt and encourage residents to drink.
  - Offer residents their preferred drinks if not medically contraindicated (e.g., offer 'social hour' for residents and families with beverage options).
  - Identify residents at risk of dehydration (e.g., those with dysphagia, dementia, and swallowing difficulties) and alert staff to pay more attention to them to ensure adequate fluid intake.
- Involve the dietician in assessing adequacy of fluid and oral intake.
- Ensure good oral care so that taste and desire/ability to drink is not hampered.
- Involve speech therapy to assess for swallowing adequacy and to provide tips and exercises to help with safe swallowing.
- Establish clear process for staff to follow to actively manage and monitor resident fluid intake when ordered, including measurement of fluid intake and output and communicate when individual fluid management goals are not being met.
- Use standard equipment to administer IV fluids to ensure the correct volume and speed of administration.
- Implement double checks to ensure the IV fluid is accurate and implemented as ordered.
- Give special consideration for residents with food and drink restrictions in advance of diagnostic testing to minimize the time required to be on those restrictions and to provide adequate amounts of fluids and food when testing is completed.

**Resources to Consider**

- CMS, LTC Survey Pathway, Hydration - <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes.html>
- CMS, LTC Survey Pathway, Nutrition - <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes.html>
- See [Appendix D](#) for suggestions on team members in your organization to include in quality improvement efforts for this topic.

**Prevent fluid and other electrolyte disorders (e.g., inadequate management of fluid)****Foundational and Ongoing Education Topics to Consider**

- Educate nurses on:
  - o Common, clinically relevant electrolytes (e.g., sodium, potassium, calcium, and magnesium)
  - o Causes of electrolyte imbalances, such as:
    - Fluid loss and dehydration
    - Diet low in essential nutrients
    - Endocrine or hormonal disorders
    - Medications
    - Kidney disease
  - o Signs and symptoms of electrolyte imbalance
- Educate and ensure staff competencies in assessment of resident fluid volume status:
  - o Hypovolemia (inadequate fluid volume) – orthostatic hypotension and signs of dehydration
  - o Hypervolemia (fluid overload) - weight gain, shortness of breath, neck vein distention, soft tissue or dependent edema

**Pre-Admission Practices**

- Identify current fluid and electrolyte disorders and how they are being managed.
- Identify fluid and dietary needs and any restrictions.

**Admission Practices**

- Conduct an assessment related to fluid and electrolyte imbalances or potential for imbalances.
- Develop care plan and nursing assistant assignment sheet based on assessment.
- Review the plan of care with the resident (and family as applicable) so that they know what to expect and can help monitor consistent implementation of the plan of care.
- Set up fluid monitoring and tracking system, including follow up on any findings, as indicated.
- Ensure timely process to follow up on lab tests for electrolytes, flagging abnormal results, and establishing criteria for when to notify the provider.
- Provide a diet that is balanced in nutrients (e.g., not relying on prepackaged foods high in sodium).
- Referral to speech therapy and dietician, as appropriate.
- At daily stand up/IDT meeting review new resident's fluid needs and interventions.
- Add resident's fluid needs and monitoring to the 24-hour report and ensure it is reviewed with all staff at shift change (appropriate staff and IDT team members should review 24-hour reports back to the last day worked in order to ensure they are aware of changes).

**Ongoing Care Practices and Monitoring**

- Evaluate the hydration needs of each resident.
- Implement fluid monitoring and tracking system, including follow up on any findings, as indicated.
- Monitor the sodium intake of residents when appropriate (e.g., residents with kidney disease, high blood pressure, heart failure).
- For residents that require a low sodium diet, make sure they know about their recommended sodium restriction, provide salt alternatives, and ensure their meals and snacks have recommended sodium levels (taking into account resident choices and preferences).
- Ensure that residents have appropriate fluid intake. Have alerts or reminders for staff and residents to encourage fluid, or to monitor intake, or to restrict fluids.
- Ensure that electrolyte supplements are given as ordered and discuss plan for monitoring with attending clinician (e.g., potassium).

**Resources to Consider**

- See [Appendix D](#) for suggestions on team members in your organization to include in quality improvement efforts for this topic.

## Prevent venous thromboembolism, deep vein thrombosis (DVT), or pulmonary embolism (PE) related to resident monitoring

### Foundational and Ongoing Education Topics to Consider

- Educate and ensure staff competencies in identifying symptoms of DVT :
  - o Causes (e.g., inactivity for long periods, conditions that impact blood clotting, bed confinement)
  - o Risks (e.g., surgery, overweight/obese, smoking, heart failure, cancer)
  - o Symptoms (pain, soreness, cramping or swelling in the affected leg, red or discolored skin on the leg, feeling of warmth in the affected leg)
- Educate and ensure staff competencies in identifying symptoms of PE (e.g., sudden shortness of breath, chest pain or discomfort that worsens with a deep breath or cough, lightheadedness or dizziness, fainting, rapid pulse, coughing up blood).

### Pre-Admission Practices

- If resident is post-surgical or confined to bed, or has other known risk factors for DVT/PT, identify current prophylaxis for DVT/PE.
- If on antithrombotic agents, identify the agent(s) used, if treatment will be on-going, and if so, monitoring plan, latest lab test results, and timing for the next lab test.

### Admission Practices

- Perform clinical assessment of resident (looking for signs and symptoms of DVT/PE).
- Assess each resident's risk for developing a DVT/PE at admission.
- Have the provider discuss the risks and benefits with the resident and family of implementation of potential interventions to reduce the risks of DVT/PE. Prophylaxis varies based on certain conditions (e.g., post-surgery, immobility, hematologic abnormality).
- Review the plan of care with the resident (and family as applicable) so that they know what to expect and can help monitor consistent implementation of the plan of care.
- Implement protocols for post-surgery or bedridden residents for DVT/PE prophylaxis (e.g., anticoagulant prophylaxis, intermittent pneumatic compression devices, and ankle pumps).

### Ongoing Care Practices and Monitoring

- Provide education to resident and family on DVT risks, symptoms, prevention, and treatments.
- Promote mobility and educate residents and families about the risks of remaining in bed/chair for prolonged period.
- Monitor that interventions for DVT/PE prevention are being carried out as intended.

### Resources to Consider

- CDC Healthcare Professionals: Training and Education, Stop the Clot®: What Every Healthcare Professional Should Know - <https://www.cdc.gov/ncbddd/dvt/training.html>
- The Society for Post Acute and Long Term Care Medicine (PALTC), Antithrombotic Therapy in the Long-Term Care Setting - <https://paltc.org/product-store/antithrombotic-therapy-long-term-care-setting>
- See [Appendix D](#) for suggestions on team members in your organization to include in quality improvement efforts for this topic.

## Prevent elopement (residents that leave the building without staff knowledge)

### Foundational and Ongoing Education Topics to Consider

- Educate staff on a) organizational policies around resident rights and freedoms to leave the building, b) processes for residents to inform staff when they are leaving, and c) processes to track residents that have left the building (e.g., when, where going, who with, medications sent along).
- Educate staff on policies and procedures for when a resident cannot be located.

### Pre-Admission Practices

- Discuss with resident and family if there are concerns about the resident being willing or able to follow the facility policy regarding leaving the building. Identify if there are safety concerns about the resident potentially leaving the building without letting staff know, or, if they do let the staff know, if there are safety concerns about the resident leaving (e.g., residents with cognitive impairment).

### Admission Practices

- Assess resident behavior patterns, preferences, needs, that may lead to the resident trying to leave the building without staff knowledge, and identify and implement individualized interventions to address needs.
- Review with the resident and family the facility policy regarding leaving the building, asking them to let staff know when the resident leaves the building.
- Establish plan to watch a new resident closely, to proactively watch for anything the resident may need, begin implementation of, at a minimum, hourly rounding for four Ps (Pain, Potty, Positioning, Possessions). Consider more frequent rounding during first 24 hours, such as every 15 minutes.
- For residents at risk of leaving the building unescorted or without letting staff know, consider use of personal tracking devices or (silent) alarms that alert staff pagers or cell phones when residents leaves the building. Obtain resident or representative consent when tracking devices are used.
- At daily stand up/IDT meeting review new residents that may be at risk of leaving the building unescorted or without letting staff know.
- Add concerns about any residents that may leave the building unescorted or without letting staff know, and monitoring plan, to the 24-hour report and ensure it is reviewed with all staff at shift change (appropriate staff and IDT team members should review 24-hour reports back to the last day worked in order to ensure they are aware of changes).

**Ongoing Care Practices and Monitoring**

- Reassess resident behavior patterns, preferences, and needs that may lead to their desire to leave the building unescorted, without letting staff know, and identify and implement individualized interventions to address unmet needs.
- Ensure adequate staffing to monitor residents at risk of leaving the building without staff knowledge.
- Ensure there are adequate indoor and outdoor safe, secure, spaces for residents to walk.
- Ensure adequate activities to keep residents engaged, and not seeking exits.
- Encourage and support families to visit and spend time with residents.
- Establish and communicate process for families to notify staff when leaving the building with the resident.
- Establish communication and build trust between staff and residents and families, asking a resident that is thinking of leaving the facility (temporarily or permanently), to talk with staff first to explore options.
- For residents at risk of leaving the building unescorted or without letting staff know, consider use of personal tracking devices or silent alarm systems that alert staff pagers or cell phones when residents are leaving the building. Obtain resident or representative consent when tracking devices are used. If used, ensure the systems are monitored and maintained properly.
- Establish process to monitor persons entering and leaving the building. For example:
  - o Use sign in and sign out sheets for families, visitors, volunteers.
  - o Share resident photos at the front desk so that front desk staff can help watch for any residents leaving the building.
  - o Consider use of cameras or having security personnel in public spaces to monitor for residents leaving the building.
- Establish and implement protocols for when residents are missing.
- Conduct practice drills for when a resident is missing.

**Resources to Consider**

- See [Appendix D](#) for suggestions on team members in your organization to include in quality improvement efforts for this topic.