

All Cause Harm Prevention in Nursing Homes



Change Package to prevent harm
(adverse events, abuse, and neglect)
for nursing home residents



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INTRODUCTION



As nursing homes across the nation work to prevent, detect, and mitigate certain categories of harm while honoring each resident’s rights and preferences, this Change Package aims to serve as a key resource to improve quality of life through safer care for the 1.4 million nursing home residents across the country.

The intended audience of this Change Package includes nursing homes participating in the National Nursing Home Quality Care Collaborative, led by the Centers for Medicare & Medicaid Services (CMS) and the Medicare Quality Innovation Network-Quality Improvement Organizations (QIN-QIOs), and anyone interested in improving the quality of life and quality of care for those living in nursing homes. Over 12,100 (78%) of the nation’s nursing homes participate in this collaborative and have used a foundational Change Package available here: https://qioprogram.org/system/files_force/resources/documents/C2_Change_Package_20170511_508.pdf

This All Cause Harm Prevention Change Package is focused on the successful practices of high-performing nursing homes. It was developed from a series of nine site visits to nursing homes across the country and the themes that emerged regarding how they approached prevention of harm while honoring each resident’s rights and preferences and how they carried out their work. The practices in the Change Package reflect how the nursing home leaders and direct care staff at these sites shared and described their efforts to prevent, detect, and mitigate harm. The information applies to both short-stay and long-stay residents.

The high-performing nursing homes visited were chosen using available data from multiple sources to identify organizations with sustained high performance in reducing all cause harm. Data sources included the CMS five star quality rating system that considers health inspection findings, quality measures, and staffing. The nursing homes that contributed information to this Change Package represented regions across the country; large and small homes; for-profit and not-for-profit homes; rural and urban homes; homes part of corporations, health systems, religious organizations, or government entities; as well as independent, standalone nursing homes.

There is no single, magic bullet to prevent all causes of harm to residents, and therefore, the Change Package covers a wide range of strategies and actions to promote resident safety. Some readers may want ideas on where to start. [Appendix A](#), titled “Need Ideas for Where to Begin? Focus Here First,” describes suggestions from the nursing homes visited on priorities for preventing all cause harm for residents.

ORGANIZATION AND HOW TO USE THE CHANGE PACKAGE



The Change Package is organized by first describing four overarching foundational components that high-performing nursing homes focus on to achieve the aim of improved quality of life for residents through safe, reliable, quality care. The four foundational components are 1) leadership; 2) committed staff, teamwork, and communication; 3) resident and family engagement; and 4) continuous learning and quality improvement. Strong commitment to these four components fosters a culture that allows and supports staff in reliably implementing timely, quality care practices while honoring each resident's rights and preferences. Detailed strategies and actions to establish the foundation for safe care are described in [Appendix B](#).

Next, this Change Package includes strategies and actions to prevent the specific types of adverse events and harms identified by the 2014 Office of Inspector General reports, which highlighted the need for nursing homes to reduce the incidence of resident harm events and to report allegations of abuse or neglect and investigation results in a timely manner (see [Appendix C](#) for key findings from these reports). Any nursing home can choose from these strategies and actions to begin testing for purposes of improving residents' quality of life through safer care. The strategies and actions range from evidence-based practices to promising practices determined to be worthy of testing by clinical and other long-term care experts in the nursing homes visited.

This Change Package is intended to be complementary to resources such as literature reviews and evidence-based tools and resources.

Office of Inspector General (OIG) Report Findings*

- An estimated 33 percent of Medicare beneficiaries experienced temporary harm and/or adverse events during their Skilled Nursing Facility (SNF) stays.
- Physician reviewers determined that 59 percent of these adverse events and temporary harm events were clearly or likely preventable.

*See more findings in Appendix C.

NOTES ON TERMINOLOGY



Abuse: The willful infliction of injury, unreasonable confinement, intimidation, or punishment with resulting physical harm, pain, or mental anguish. Abuse also includes the deprivation by an individual, including a caretaker, of goods or services that are necessary to attain or maintain physical, mental, and psychosocial well-being. It includes verbal abuse, sexual abuse, physical abuse, and mental abuse, including abuse facilitated or enabled through the use of technology.

Adverse Events: An untoward, undesirable, and usually unanticipated event that causes death or serious injury, or risk thereof.

All Cause Harm: Harm and injury to residents from any cause.

Change Package: This Change Package is a compilation of strategies and actions described by high-performing nursing homes to prevent harm events related to medication, resident care, infections, abuse, and neglect. The strategies and actions may generate ideas for other nursing homes to test for purposes of improving residents' quality of life through safe care.

Family/Resident Representative: People defined/chosen by the resident to be involved in their life/care or authorized by state or federal law to act on behalf of the resident.

Neglect: The failure of the facility, its employees, or service providers to provide goods and services to a resident that are necessary to avoid physical harm, pain, mental anguish, or emotional distress.

Nursing Home/Facility: Both terms are used, recognizing that people have different preferences on how to refer to the organization that is providing short- or long-term residential accommodations with healthcare. Other similar terms include living center or care center.

Patient/Resident: Both terms are used, recognizing that people may have different preferences, sometimes based on their length of stay.

Stand-up/Interdisciplinary Team Meeting: Meetings with representation from all disciplines involved in care. Team members share their varied expertise and perspectives so that together they can accomplish what is needed for the resident/family, and learn from one another. Many nursing homes hold a daily, morning, interdisciplinary team meeting to review and discuss daily goals, key information and strategies to help the team develop a shared understanding of what is needed to deliver high quality and safe care. Some nursing homes prefer a rapid meeting format, sometimes with members standing, to balance meeting and care time commitments.

Twenty Four (24) Hour Report: A common communication tool used by nursing homes. It is typically completed by nursing staff, although other disciplines may also contribute to it, at the end of each shift. It documents changes in resident condition and key items to monitor or follow up on.

ACKNOWLEDGMENTS



The following organizations hosted site visits and shared their time, information on effective practices and experiences, which informed the content of this Change Package.

- **Apostolic Christian Home** *Rittman, OH*
- **Bethany Health Care Center** *Framingham, MA*
- **Fairmont Rehabilitation Hospital** *Lodi, CA*
- **Hughes Health & Rehabilitation** *West Hartford, CT*
- **Immaculate Heart of Mary, Senior Living Community** *Monroe, MI*
- **Lakewood Health System** *Staples, MN*
- **Phoenix Mountain Nursing Center** *Phoenix, AZ*
- **Riverside Health & Rehabilitation** *Thomaston, GA*
- **Sea View Hospital Rehabilitation Center and Home** *Staten Island, NY*



ACHIEVING IMPROVED QUALITY OF LIFE THROUGH SAFE CARE

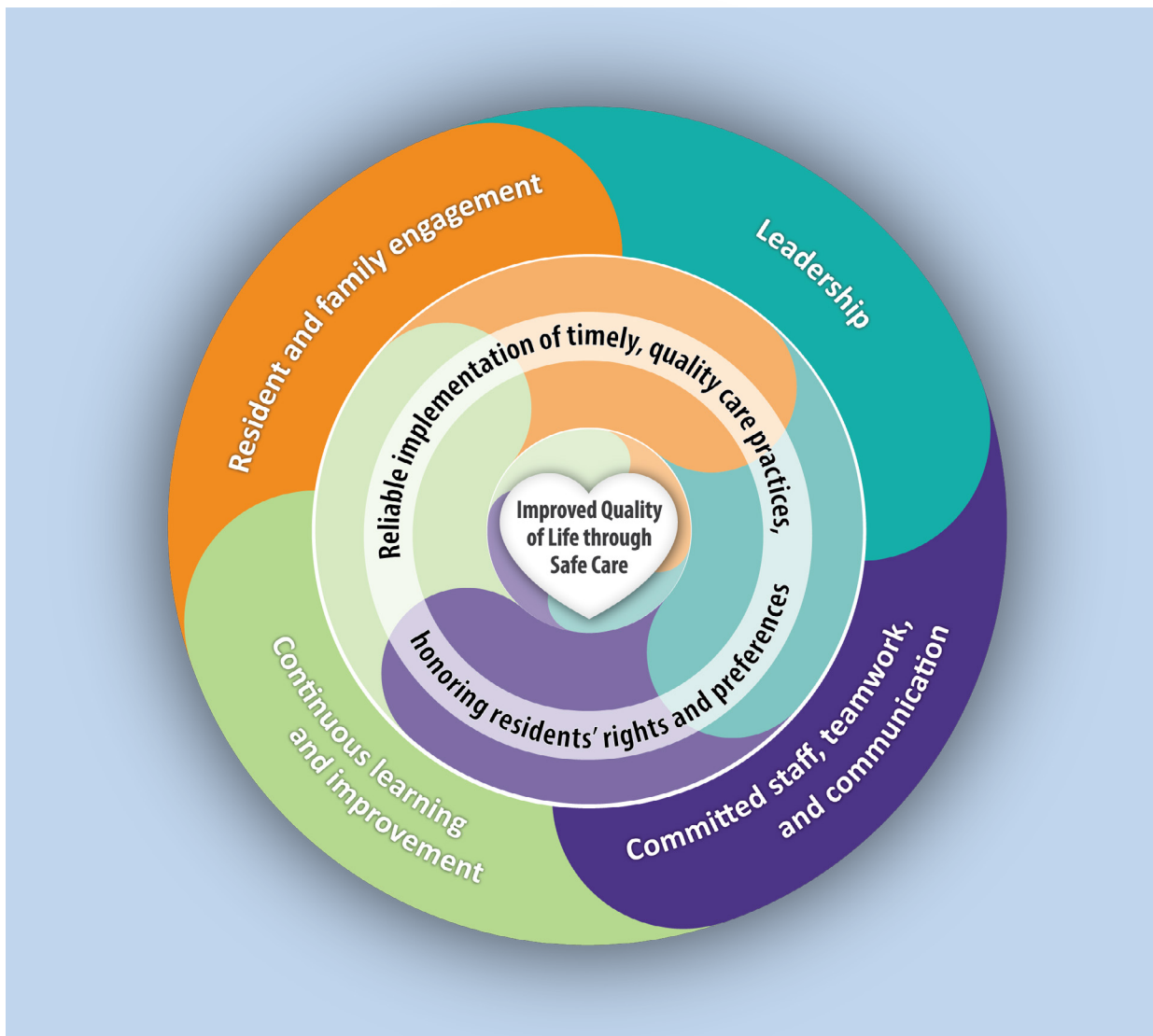


The model below depicts what high-performing nursing homes focus on to achieve the aim of improved quality of life for residents, through safe, reliable, quality care. In order to reliably implement timely, quality care practices that prevent physical and psychological harm and injury to residents, four foundational components of the organization's culture are essential.

These four components are:

- leadership • committed staff, teamwork, and communication • resident and family engagement • and continuous learning and quality improvement.

Strong commitment to these four components fosters a culture that allows and supports staff in reliably implementing timely, quality care practices while honoring each resident's rights and preferences.



FOUNDATIONAL COMPONENTS THAT SUPPORT A SAFETY CULTURE



The table below highlights strategies within each of the four components that support a culture of safety and support staff in reliable implementation of timely, quality care practices, while honoring residents' rights and preferences. For specific action items to strengthen or improve your organization's performance in these four key areas, refer to [Appendix B: "Foundational Components."](#) The high-performing nursing homes visited focused on continuously improving strategies and actions in each component - they are not intended to be a once and done checklist. Reflect on the actions your organization has in place and identify opportunities for improvement or refinement.

Leadership	Resident and Family Engagement	Committed Staff, Teamwork, and Communication	Continuous Learning and Improvement
<ul style="list-style-type: none"> • Establish a vision for safe care • Set high expectations for staff for customer service and safety-minded actions • Develop and support a culture of trust, transparency, open communication, respect, teamwork, and inclusion • Engage the Board of Directors and corporate leaders in building a culture of safety • Select and develop leaders and staff that are accountable for safety • Develop a just and fair culture 	<ul style="list-style-type: none"> • Involve resident/patient/family in goal setting, developing, and updating care plans and daily decisions • Promote open communication among the care team and the resident/patient/family • Engage residents and families in organization improvement efforts 	<ul style="list-style-type: none"> • Create a highly effective and collaborative multidisciplinary team • Develop an infrastructure that promotes teamwork and communication • Provide tools and resources that support teamwork, communication, and resident monitoring 	<ul style="list-style-type: none"> • Identify staff learning needs to provide safe care • Provide orientation and opportunities for ongoing education to support learning • Evaluate effectiveness of education • Set organizational goals for safe care by using benchmark data • Identify and track measures to understand organizational performance • Identify and prioritize areas to improve • Use a quality improvement process

Focusing solely on the foundational components for a culture of safety shown in the previous table is not enough. This Change Package focuses on specific strategies and actions that staff at high-performing nursing homes implemented related to reliable implementation of timely, quality care practices to prevent the types of adverse events, harm, abuse, and neglect described below. These types of adverse events, harm, abuse, and neglect were identified from the 2014 Office of Inspector General (OIG) reports that raised awareness of opportunities for improvements in these areas.

High-performing nursing homes focused on preventing, detecting, and mitigating the following types of harms:

- Adverse events related to medications, including:
 - Medication-induced delirium or other changes in medical condition
 - Excessive bleeding due to medication
 - Falls/falls with injuries or other trauma with injury secondary to effects of medication
 - Constipation, obstipation, and ileus related to medication
- Adverse events related to resident care, including:
 - Fall or other trauma with injury related to resident care
 - Pressure and other skin injury such as skin tears, abrasions
 - Exacerbations of preexisting conditions resulting from an omission of care
 - Acute kidney injury or insufficiency secondary to fluid maintenance
 - Fluid and other electrolyte disorders (e.g., inadequate management of fluid)
 - Venous thromboembolism, deep vein thrombosis (DVT), or pulmonary embolism (PE) related to resident monitoring
 - Elopement
- Adverse events related to infections, including:
 - Aspiration pneumonia and other respiratory infections
 - Surgical site infection (SSI) associated with wound care
 - Urinary tract infection associated with catheter (CAUTI)
 - *Clostridium difficile* infection (CDI)
 - Other infection related events
- Abuse and neglect, including:
 - Mistreatment, injuries of unknown source, and misappropriation of resident property

The following section includes specific actions that any nursing home can choose from to begin testing for purposes of improving residents' quality of life through safer care. The actions, described by the staff interviewed at high-performing nursing homes, range from evidence-based practices to promising practices determined to be worthy of testing by clinical and other long-term care experts in the nursing homes visited.

CHANGE PACKAGE: Actions to Prevent All Causes of Harm in Nursing Homes



CHANGE PACKAGE

Reliable Implementation of Timely, Quality Care Practices

The following care practices were described by high-performing nursing homes to prevent, detect, and mitigate harm events related to medication, resident care, infections, abuse, and neglect. The care practices are formatted with square bullets so that you can use this resource as an assessment of your practices and to assist in identifying actions you want to implement or discuss with your team.

Each section includes the following components:

- a) Foundational and Ongoing Education Topics to Consider
- b) Pre-Admission Practices
- c) Admission Practices
- d) Ongoing Care Practices and Monitoring
- e) Resources to Consider

EVENTS RELATED TO MEDICATION

Prevent medication-induced delirium or other changes in medical condition

Foundational and Ongoing Education Topics to Consider

- Educate staff on delirium, dementia, and depression – causes, risk factors, and symptoms, including behavioral expressions/changes, treatment, and prevention. Include a focus on distinguishing between these conditions.
- Educate nursing assistants on symptoms to watch for when a resident is taking a medication that may put them at risk for delirium.
- Educate nurses on the importance of assessing for resident reactions/response to new or changed medication. “For any resident changes, think if/how medications may have played a role.”

Pre-Admission Practices

- Review medications for appropriateness.
- Review medications with discharging physician and facility attending physician/practitioner, as needed.
- Review medications with consulting pharmacist, as needed.

EVENTS RELATED TO MEDICATION

Admission Practices

- Establish a process where the resident's medications are reviewed and reconciled, looking for indications/diagnoses, dosing, polypharmacy, and medications that may cause delirium (e.g., opiates or psychotropic medications) or other negative side effects. Follow up with an appropriate provider if there are questions or if information is missing.
- Involve the resident and family in the medication reconciliation process.
 - o Talk to resident and family to better understand family history, perceptions of medications, and preferences in order to help inform medication decisions.
- Provide education on and discuss the medications that the resident is taking with the resident and family so that they are aware of benefits and risks.
- Establish a system that alerts nursing staff on specific adverse side effects for medications (e.g., EHR functionality that highlights side effects and drug interactions or other references available through pharmacy consultation).
- At daily stand up/interdisciplinary team (IDT) meeting, review new resident's admission medications and potential side effects to monitor and report.
- Add medication changes that need monitoring to 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 they worked in order to ensure they are aware of changes).
- Nurses reconcile medications on each shift for the first 24 hours (reconcile admission orders, transfer orders, discharge orders, and the medication administration record).
- Use the Beers criteria to identify potential inappropriate medication use in older adults.

Ongoing Care Practices and Monitoring

- Have a process in place where prescribers can flag if a medication change has been discussed with resident/family/caregivers or if staff should have this discussion prior to starting medication, or, if the medication is urgent, an expectation that the discussion will occur within 24 hours.
- At daily stand up/IDT meeting, review residents' medication changes and specific monitoring needed.
- Add medication changes that need monitoring to 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 where the resident's chart is flagged for any new or changed medications so that the nurse can assess the resident's response to the medication for at least three days after the change (watching for any changes in condition and side effects including allergic reactions, thrush, hypoglycemia, hypotension, etc.).
- Avoid/eliminate the use of PRN (as needed) psychotropic medications.
- For medications such as antipsychotics and other psychoactive agents, establish process for IDT to discuss and implement gradual dose reduction when appropriate, considering non pharmacologic interventions.
- Establish a process for ongoing medication review that assesses need, impact, side effects, discrepancies, and determines appropriateness of the medication. Involve the pharmacist.
 - o Review all medications monthly and discontinue any that do not have a clear indication.
 - o Report pharmacist identified irregularities in dispensing and administration of drugs, and recommendations, to key team members, including the attending physician and director of nursing.
- Establish a process for timely review of and follow up on pharmacist recommendations. Involve the medical director for support in this process.
 - o Bring medication discrepancies or irregularities that need immediate attention to the director of nursing.
 - o Assign responsibility for following up on the pharmacist identified errors, irregularities, and discrepancies, and documenting actions taken.

o Review the monthly pharmacist report, submitted to the administrator, with clinicians and direct care staff to support ongoing learning and to identify if any medication related policies need updating or development.

- Establish a process for timely review of and follow up on pharmacist recommendations. Involve the medical director for support in this process.
- Establish a process to evaluate/assess for delirium, distinguishing it from other conditions such as dementia or depression.
- Create transparency through benchmarking/trending by clinician (e.g., number of medications per resident, number of residents on antipsychotics, or other psychotropic medications).

Resources to Consider

- American Geriatrics Society Beers Criteria for Potentially Inappropriate Use of Drugs in Older Adults - <https://www.americangeriatrics.org/publications-tools> and click on Updated AGS Beers Criteria.
- CMS, Hand in Hand Dementia Training (includes information on delirium) - <https://surveyortraining.cms.hhs.gov/pubs/HandinHand.aspx>
- National Partnership to Improve Dementia Care in Nursing Homes, resources for professionals - <https://nhqualitycampaign.org/professionalDementia.aspx>
- National Institute on Aging, Alzheimer's and dementia resources for professionals (includes educational materials on delirium) - <https://www.nia.nih.gov/health/alzheimers-dementia-resources-for-professionals>
- ConsultGeri, education and training resources on Delirium: A Patient and Family Centered Care Approach - <https://consultgeri.org/education-training/e-learning-resources/delirium-patient-and-family-centered-care-approach>
- The Society for Post-Acute and Long-Term Care Medicine, Quality Prescribing - <https://paltc.org/quality-prescribing>
- CMS, Adverse Drug Event Trigger Tool - <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/Downloads/Adverse-Drug-Event-Trigger-Tool.pdf>
- CMS, LTC Survey Pathway, Dementia Care - <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes.html>
- CMS, LTC Survey Pathway, Behavioral and Emotional Status - <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 excessive bleeding due to medication (antithrombotics)

Foundational and Ongoing Education Topics to Consider

- Educate nurses on different types of antithrombotics which include both anticoagulants (e.g., warfarin and newer agents) and antiplatelet agents (e.g., aspirin, clopidogrel). This education should include: risks associated with each type of medication, foods and other commonly used medications that could impact effectiveness, which agents require regular monitoring, and which agents can be reversed if severe bleeding was to occur. For warfarin, include education on the role of the INR testing and maintenance therapy.
- Educate nursing assistants on symptoms to watch for that may indicate bleeding (e.g., bruising, bleeding, swelling, pain, discoloration anywhere on the body, sudden headache, dizziness, weakness, blood in urine, or black stools).
- Educate staff on using a gentle and calm approach when assisting residents with moving or activities of daily living (e.g., dressing, personal care, eating), so as not to cause any trauma to the residents skin, joints, etc.

Pre-Admission Practices

- Review anticoagulant use and monitoring, and determine when labs were performed, the most recent results from the discharging facility, and when the next labs are due.
- Discuss history of antithrombotic use with the resident and family (e.g., how long they have been taking, how they have been monitoring, any concerns or complications).

Admission Practices

- Have facility attending physician/practitioner review antithrombotic medication use to ensure appropriate continued use.
- Nurses reconcile medications on each shift for the first 24 hours (e.g., reconcile admission orders, transfer orders, discharge orders, and medication administration record).
 - Include review and reconciliation of antithrombotic medication orders. Follow up with provider on questions or missing information.
- Discuss and review the medication plan with the resident (and family as applicable) so that they know what to expect and can help monitor consistent implementation of the plan.
- Establish a process upon admission to obtain the resident's latest lab results (from previous setting) and to set up lab work as ordered.
- Establish a system that alerts nursing staff to watch for specific adverse side effects for medications.
- At daily stand up/IDT meeting, review new resident's admission antithrombotic medications and potential or observed side effects.
- Add warfarin to 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

- Promote the use of standardized protocols (e.g., nurse or pharmacist run anticoagulation clinic to monitor and adjust dosage of anticoagulant agents).
- Have a process to weigh the risks and benefits of each type of antithrombotic agent to help determine the best choice for each resident (e.g., warfarin as compared to newer agents).
- Establish alerts for nursing staff and providers for medications that can interact with antithrombotics (e.g., antibiotics, antifungals, aspirin, ibuprofen, antacids).
- Involve the dietician in helping the resident and family to understand how certain foods and beverages can make anticoagulants less effective in preventing blood clots, or beverages that can increase the effects of warfarin, and to assist with menu planning.
- Establish alerts for nursing staff and providers regarding fall risk implications for residents on antithrombotics (staff needs to know if a person taking an antithrombotic falls as they are at even greater risk for bleeding).
- Add anticoagulant medication changes that need monitoring to 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). The key is to have a process to notify staff if there have been significant changes.

Resources to Consider

- American Heart Association, A Patient's Guide to Taking Warfarin - http://www.heart.org/HEARTORG/Conditions/Arrhythmia/PreventionTreatmentofArrhythmia/A-Patients-Guide-to-Taking-Warfarin_UCM_444996_Article.jsp#.Wvn7YjfruUk
- CDC Healthcare Professionals: Training and Education, Stop the Clot®: What Every Healthcare Professional Should Know - <https://www.cdc.gov/ncbddd/dvt/training.html>
- See [Appendix D](#) for suggestions on team members in your organization to include in quality improvement efforts for this topic.

Prevent falls/falls with injuries or other trauma with injury secondary to effects of medication

See sections titled "[Prevent fall or other trauma with injury related to resident care](#)" and "[Prevent medication-induced delirium or other changes in medical condition.](#)"

Prevent constipation, obstipation, and ileus related to medication

Foundational and Ongoing Education Topics to Consider

- Educate nurses about medications that can lead to constipation, obstipation, and ileus, as well as signs and symptoms, management and prevention of constipation, obstipation, and ileus.
- Educate nursing assistants on symptoms to watch for and monitoring of bowel movements (e.g., watch for resident passing fewer stools than is their normal, hard stools, straining to have bowel movements, or feeling of blockage in rectum that prevents bowel movements).

Pre-Admission Practices

- Review medications that could lead to constipation, obstipation, or ileus.
- Review with resident and family any significant history or concerns related to bowel habits.

Admission Practices

- Assess resident's bowel habits/schedule on admission (three-day observation/diary, and then evaluate the need to continue the diary to establish elimination patterns).
- Discuss bowel routines with resident to determine if specific foods, fluids, or medications were used to support regular bowel movement.
- Discuss and determine 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

- Monitor and document resident's bowel movements and any concerns.
- Establish alerts/flags and follow up protocol if a person has not had a bowel movement in a certain time period (e.g., three days or per the resident's normal bowel routine).
- Assess need for scheduled laxatives or stool softeners for residents taking medications that can cause changes in bowel patterns (e.g., antacids, antidepressants, some blood pressure medicines, cold medicines (antihistamines), calcium and iron supplements, or narcotic pain medicines).
- Ensure residents are up and moving about as much as they are able.
- Provide food choices to promote regular bowel movements (e.g., fiber, fruits, and vegetables).
- Offer residents their preferred food choices and beverages during activities.
- Provide residents with fluids at meals and throughout the day (if not contraindicated).
 - Consider providing 'hydration stations' (e.g., water dispensers that allow residents, families, or staff to obtain water at any time).

Resources to Consider

- Mayo Clinic, Constipation - <https://www.mayoclinic.org/diseases-conditions/constipation/symptoms-causes/syc-20354253>
- UCSF Health, Constipation - <https://www.ucsfhealth.org/education/constipation/>
- Statis SC and Jorge T., Update on the management of constipation in the elderly: new treatment options, Clin Interv Aging. 2010; 5: 163–171. - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2920196/>
- Beers Criteria for Potentially Inappropriate Medication Use in Older Adults - <https://geriatricsonline.org/ProductAbstract/american-geriatrics-society-updated-beers-criteria-for-potentially-inappropriate-medication-use-in-older-adults/CL001>
- See [Appendix D](#) for suggestions on team members in your organization to include in quality improvement efforts for this topic.

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
- Wound Ostomy and Continence Nurses Society (WOCN), education and publications - 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.

EVENTS RELATED TO INFECTION

Prevention of all types of infections

Foundational and Ongoing Education Topics to Consider

- Educate staff on infection prevention policies and test for competency, including, but not limited to:
 - o Standard precautions (i.e., hand hygiene, proper selection and use of personal protective equipment, safe injection practices, respiratory hygiene/cough etiquette, environmental cleaning and disinfection, and reprocessing of reusable medical equipment)
 - o Transmission-based precautions.
 - o Antibiotic stewardship.
 - Educate clinicians about resistance and optimal prescribing.
 - o Causes, risks, assessment, treatment, and prevention of:
 - Pneumonia/upper respiratory infections.
 - Aspiration.
 - Non-catheter and catheter-associated urinary tract infections.
 - Surgical site assessment and wound care.
 - *Clostridium difficile* infection prevention and management.
- Preventing transmission of infections from healthcare workers to residents through occupational health policies that include but are not limited to influenza immunization and following work restrictions when ill.
- Educate residents and family on infection prevention and control (e.g., refrain from visiting when ill, hand hygiene).

Pre-Admission Practices

- Assess for any current infections and how they are being managed/treated.
- Review the type of antibiotics being used, the route they are being administered, how long they have been used, and when the stop date is.
- Obtain any recent or pending laboratory (e.g., culture) or radiology results. If the results are not yet available, establish a process to obtain and review the results.
- Notify the infection preventionist and enter applicable information in the facility infection surveillance and tracking system.
- Ensure appropriate room placement of resident, providing resident requiring transmission-based precautions with a single room when possible, and using evidence-based guidelines for making decisions about resident placement.
- Ensure appropriate equipment is available and set up prior to admission (e.g., personal protective equipment- gloves, gown, facemask and dedicated medical equipment).

Admission Practices

- Review any antibiotic use for appropriateness. Review with physician/practitioner and/or pharmacist as needed. Establish a plan for an antibiotic time-out, reassessment of antibiotic, stop date of antibiotic.
- Review cultures for final result and ensure the culture result will be obtained if the final result is not available yet.
- Assess need for and appropriately provide seasonal influenza vaccine and pneumococcal vaccine (use standing orders for assessment and administration of these vaccines).

- Notify the infection preventionist if not already done, and enter additional applicable information in the facility infection surveillance and tracking system (e.g., track which residents have infections, signs and symptoms of infection, any transmission based precautions, lab/culture results, antibiotics prescribed, time-out or reassessment of antibiotic, stop date of antibiotic).
- Ensure appropriate room placement of resident, providing resident requiring transmission-precautions in a single room when possible, and using evidence-based guidelines for making decisions about resident placement and duration of precautions.
- Ensure all equipment (e.g., personal protective equipment and dedicated medical equipment such as blood pressure cuff) and signage are in place.
- Communicate clearly with healthcare providers, caregivers, residents, and families about policies and provide clear documentation of rationale for why transmission-based precautions are initiated and when and why they will be discontinued.
- At daily stand up/IDT meeting review new resident's infections, antibiotic use/treatment plan, precautions to prevent spread.
- Add infections, antibiotic use, precautions and interventions to the 24-hour report and ensure this 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 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

- Develop and implement organizational evidence-based infection prevention and control policies.
- Use 'care paths' or decision tools to guide nurses in monitoring signs and symptoms of infection (such as for symptoms of UTI or respiratory infections) and for contacting the provider with specific information to aid the provider in determining appropriate tests, diagnosis, and management.
 - Use standardized communication tools (e.g., SBAR) to communicate information to the physician
- Use criteria/guidelines to support physician/practitioner diagnosis of infection and initiation of antibiotics.
- With any new/suspicion of infection:
 - Ensure infection prevention and control nurse notified and involved.
 - Notify resident and family members of infection, treatment plan, and transmission-based precautions (if necessary).
 - Ensure appropriate radiology/labs/culture obtained to confirm infection. Ensure final result is obtained.
 - Ensure appropriate initiation of antibiotics (e.g., standardized criteria for infection is met).
 - Ensure appropriate room and roommate.
 - Ensure appropriate signage, equipment, and supplies are available.
 - Update the plan of care and nursing assistant assignment sheet with any interventions.
 - At daily stand up/IDT meeting review new infections, antibiotic use, precautions, and interventions.
 - Add infections, antibiotic use, precautions and interventions to the 24-hour report and ensure this 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 in order to ensure they are aware of changes).
 - Enter applicable information in the facility's surveillance plan and tracking program (e.g., track which residents have infections, signs and symptoms of infection, any transmission based precautions, lab/culture results, antibiotics prescribed, time-out or reassessment of antibiotic, stop date of antibiotic).

- Make soap and water and alcohol-based hand sanitizers readily available throughout the facility to support expectations with hand hygiene for staff, residents, and families.
- Ensure handling of linens to avoid contamination of air, surfaces, and persons (e.g., do not carry dirty linens down hallways – have bins to collect linens in the room when indicated).
- Ensure that reusable equipment is not used for the care of another resident until it has been appropriately cleaned and disinfected and that single-use items are properly discarded.
- Use floor, counter, and furniture surfaces that can be thoroughly cleaned. Follow established protocol for cleaning procedures (e.g., clean and disinfect high touch surfaces in rooms of residents on transmission-based precautions on a daily basis).
- Conduct audits on practices of hand hygiene, use of gloves, and other personal protective equipment (including donning and doffing), and environmental and equipment cleaning and disinfection. Define other practices that will be audited (e.g., point of care testing, urinary catheter maintenance, wound care, central venous catheter maintenance). Provide results of audits to staff.
- Map out infections in the building, current and over time to observe for trends, containment or spread, and to assist in decision making for potential resident placement.
 - Use color coding or other indicators for easy visualization of the types and locations of infections that residents have.
- Ensure residents are placed in appropriate rooms. In general, it is best to place residents requiring transmission-based precautions in a single room. Use guidelines for making decisions about resident placement.
- Group activities – maintain each resident’s ability to socialize and have access to rehabilitation opportunities, following guidelines for when temporary transmission-based precautions are necessary, and when residents may be allowed to be in common areas and to participate in group meals or activities.
- Implement antibiotic stewardship. Follow CDC protocols for antibiotic stewardship in LTC.
 - Leadership Commitment: Dedicating necessary human, financial, and information technology resources
 - Accountability: Appointing a single leader responsible for program outcomes. Experience with successful antibiotic stewardship programs show that a physician leader is effective.
 - Drug Expertise: Appointing a single pharmacist leader responsible for working to improve antibiotic use.
 - Action: Implementing at least one recommended action, such as systemic evaluation of ongoing treatment need after a set period of initial treatment (i.e. “antibiotic time out” after 48 hours).
 - Tracking: Monitoring antibiotic prescribing and resistance patterns.
 - Reporting: Regular reporting information on antibiotic use and resistance to doctors, nurses and relevant staff.
 - Education: Educating clinicians about resistance and optimal prescribing.

Resources to Consider

- Agency for Healthcare Research and Quality (AHRQ), Antibiotic use protocols, policies and practices - <http://www.ahrq.gov/nhguide/index.html>
- CDC, Clostridium *difficile* infection prevention - https://www.cdc.gov/hai/organisms/cdiff/Cdiff_settings.html
- CDC, The Core Elements of Antibiotic Stewardship for Nursing Homes - <http://www.cdc.gov/longtermcare/index.html>
- CDC, Guideline for Disinfection and Sterilization in Healthcare Facilities - https://www.cdc.gov/hicpac/pdf/guidelines/Disinfection_Nov_2008.pdf
- CDC, Guidelines for Environmental Infection Control in Health-Care Facilities, Recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee (HICPAC) - <https://www.cdc.gov/infectioncontrol/pdf/guidelines/environmental-guidelines.pdf>

- CDC, Guideline for Prevention of Catheter-Associated Urinary Tract Infections - <https://www.cdc.gov/infectioncontrol/guidelines/cauti/index.html>
- CDC, Guideline for Preventing Healthcare Associated Pneumonia - <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5303a1.htm>
- CDC, Hand Hygiene in Healthcare Settings - <https://www.cdc.gov/handhygiene/index.html>
- CDC, Infection Prevention and Control Assessment Tool for Long-term Care Facilities - <https://www.cdc.gov/infectioncontrol/pdf/ICAR/LTCF.pdf>
- CDC, National Nursing Home Quality Improvement C. difficile Infection Prevention Assessment Checklists - <https://www.cdc.gov/longtermcare/prevention/index.html>
- CDC, Prevention Tools for Nursing Homes and Assisted Living - <https://www.cdc.gov/longtermcare/prevention/index.html>
- CMS, LTC Survey Pathway, Infection Prevention, Control & Immunizations - <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes.html>
- CMS, LTC Survey Pathway, Urinary Catheter or Urinary Tract Infection - <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes.html>
- CMS, State Operations Manual Appendix PP – Guidance to Surveyors for Long Term Care Facilities: §483.80 F880 Infection Control Regulation and Guidance - https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltcf.pdf
- QIO Program, Training resources on CDI prevention and management, and antibiotic stewardship - <https://qioprogram.org/nursing-home-training-sessions>
- Society for Healthcare Epidemiology of America (SHEA), Long Term Care resources - <https://www.shea-online.org/index.php/long-term-care>
- SHEA and APIC, Guideline: Infection prevention and control in the long-term care facility - http://www.apic.org/Resource_/TinyMceFileManager/Practice_Guidance/id_APIC-SHEA_GuidelineforICinLTCFs.pdf
- SHEA and CDC, Surveillance Definitions of Infections in Long-Term Care Facilities – <http://www.jstor.org/stable/10.1086/667743>
- Other articles:
 - Dubberke, E.R., and Gerding, D.N. (2011). Rationale for hand hygiene recommendations after caring for a patient with *Clostridium difficile* infection. A compendium of strategies to prevent healthcare-associated infections in acute care hospitals: A fall 2011 update. <https://www.shea-online.org/images/patients/CDI-hand-hygiene-Update.pdf>
 - Siegel, J.D., Rhinehart, E., Jackson, M., Chiarello, L., and the Healthcare Infection Control Practices Advisory Committee. (2007). 2007 Guideline for isolation precautions: Preventing transmission of infectious agents in healthcare settings. Accessed on September 20, 2018 from <https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>
 - Siegel, J.D., Rhinehart, E., Jackson, M., and Chiarello, L. (2006). Management of multidrug-resistant organisms in healthcare settings, 2006. Accessed on September 20, 2018 from <https://www.cdc.gov/hicpac/pdf/mdro/mdroguideline2006.pdf>
 - Loeb, M., et al. (2005). Effect of a multifaceted intervention on number of antimicrobial prescriptions for suspected urinary tract infections in residents of nursing homes: Cluster randomised controlled trial. *BMJ*, 331, 669. Accessed on September 20, 2018, from <http://www.bmj.com/content/bmj/early/2004/12/31/bmj.38602.586343.55.full.pdf>
- See [Appendix D](#) for suggestions on team members in your organization to include in quality improvement efforts for this topic.

Prevent aspiration pneumonia and other respiratory infections

See section titled “[Prevention of all types of infections](#)” for information on Foundational and Ongoing Education Topics to Consider, Pre-Admission Practices, Admission Practices, Ongoing Care Practices and Monitoring, and Resources to Consider. Additional information specific to aspiration pneumonia and other respiratory infections is below.

- Prior to admission, assess diagnosis or history of swallowing difficulties or aspiration and interventions needed to prevent aspiration.
- Assess each resident’s risk factors for aspiration due to dysphagia (e.g., stroke, Alzheimer’s disease, Parkinson’s disease, being less alert due to medicines, illness, coma, esophageal stricture, gastroesophageal reflux, drinking large amounts of alcohol, general anesthesia, age).
- Conduct a speech/language therapy evaluation for those at risk of aspiration (includes history, evaluation of strength/movement of muscles used in swallowing, observation of eating to see posture, behavior, and oral movements).
- Identify and implement precautions to take to reduce risk of aspiration.
 - o Recognize signs and symptoms of aspiration.
 - o Support good posture (e.g., sitting as upright as possible, not slumped or hunched over, head not tilted to the side, back, or front) when they are eating or drinking.
 - o Keep the head of the bed at or more than 45 degrees after a meal, if not contraindicated.
 - o Implement other treatments as ordered (e.g., exercises to improve muscle movement, other positions or strategies to help the resident swallow effectively, specific food and liquid textures that are easier and safer to swallow).
 - o Prevent aspiration during enteral feeding (e.g., head of bed elevated if not contraindicated, verify appropriate placement of feeding tube).
- Educate and ensure competency of staff on precautions, signs, and symptoms of aspiration
- Implement precautions to reduce pathogen count to reduce pneumonia risk.
 - o Provide or support residents to practice good oral care (morning and evening - brush before meals) to cut back on germs in saliva. Ensure nursing assistant (or other designated staff) have responsibility for oral care, are trained in providing it, and trained in responding to residents who might refuse oral care (e.g., try again after a bit). Implement consistent nursing assistant assignment so that staff are familiar with when and how residents prefer oral care.
 - o Provide dental services and care for residents.
- Educate and ensure competency of staff on precautions, signs, and symptoms of aspiration.
- Establish policies to prevent healthcare associated pneumonia (following guidelines such as those from the CDC).
- Assess residents need for the pneumococcal vaccination and administer as appropriate.

Prevent surgical site infection (SSI) associated with wound care

See section titled “[Prevention of all types of infections](#)” for information on Foundational and Ongoing Education Topics to Consider, Pre-Admission Practices, Admission Practices, Ongoing Care Practices and Monitoring, and Resources to Consider. Additional information specific to preventing surgical site infection associated with wound care is below.

- Prior to admission, assess need for topical management of surgical sites and wounds.
- Perform hand hygiene before touching the resident, before any clean/aseptic procedure including wound care, after body fluid exposure/risk, after touching the resident, and after touching resident surroundings.
- Conduct nursing assessment of surgical site, documenting and notifying clinician of details such as any area of redness or swelling, feeling hot to touch, drainage – type and amount, size of any open area.
- Use a tool to guide a thorough nursing assessment of the surgical site wound.

- Ensure suture removal date is identified, and who is responsible for removal.
- Conduct ongoing observation for fever, increased pain at surgical site.
- Support safe resident movement and exercise in order to avoid falls and potential wound dehiscence.

Prevent urinary tract infection associated with catheter (CAUTI)

See section titled "[Prevention of all types of infections](#)" for information on Foundational and Ongoing Education Topics to Consider, Pre-Admission Practices, Admission Practices, Ongoing Care Practices and Monitoring, and Resources to Consider. Additional information specific to preventing urinary tract infection associated with catheter is below.

- Follow guidelines for prevention of urinary tract infections associated with catheters (such as those available from the CDC - <https://www.cdc.gov/infectioncontrol/pdf/guidelines/cauti-guidelines.pdf>).
- Assess for current urinary catheter use preadmission - review indications, how long the catheter has been in place. If appropriate, coordinate removal prior to admission.
- For all residents admitted with a urinary catheter, assess the indications/need for catheter use.
- Discuss risks and benefits of catheter use with residents and families.
- Avoid all unnecessary use, including use of a urinary catheter as a way to:
 - o Measure urine output when other options are available (alternative methods to consider: urinals, collection devices in the toilet/commode).
 - o Manage incontinence in residents without urinary retention (alternative methods to consider: bladder program/schedule, incontinence garment, straight catheter, condom catheter).
- When catheters are being used, ensure proper aseptic catheter insertion, peri-care, proper emptying procedure including pre and post procedure hand hygiene, ensure tubing is not kinked, and keep the collection bag below the bladder, no disconnections of the closed system, no irrigations unless obstruction is anticipated (follow guidelines, such as those available from the CDC).
- Develop a plan in collaboration with IDT to discontinue catheter use when indicated; use alerts and reminders and 'stop orders' that prompt the nurse to remove the catheter by default after a certain time period or a set of clinical conditions has occurred.
- Consider the purchase of a bladder scanner and train staff on its use as a way to identify retention and assess bladder emptying.
- Develop working relationships with other community health care providers to jointly promote awareness and education on UTI and catheter use and care.

Prevent *Clostridium difficile* infection (CDI)

See section titled "[Prevention of all types of infections](#)" or information on Foundational and Ongoing Education Topics to Consider, Pre-Admission Practices, Admission Practices, Ongoing Care Practices and Monitoring, and Resources to Consider. Additional information specific to preventing *Clostridium difficile* infection is below.

- Identify and follow CDI identification, prevention, and treatment guidelines and protocols, including:
 - o Pre-admission: Assess if the new resident has diarrhea and CDI.
 - o Implement an early response to potential CDI.
 - Establish a process to ensure nurses are aware of residents with diarrhea.
 - Work with the medical director to establish criteria to suspect CDI.
 - Implement pre-emptive contact precautions.
 - Implement standing orders to test for CDI when criteria are met.
 - Set up alert system with the lab for direct notification of a positive CDI result.
 - o Minimize transmission by residents and families, when a resident has a CDI:
 - Keep the resident in a private room if possible.
 - Encourage resident and family hand hygiene to include washing hands with soap and water after toileting, before eating, and when hands are soiled.

- Consider and establish strategies for restricting resident movements to common areas during narrow time periods to quickly contain and prevent spread of infection when the resident has acute diarrhea with CDI.
- o Minimize transmission by staff.
 - Educate staff on how *Clostridium difficile* emerges and spreads, and that it is not killed by soap and water or alcohol, but rubbing hands together and rinsing helps to wash *Clostridium difficile* down the drain.
 - Use contact precautions (i.e., gown and gloves) for residents with active CDI.
 - Make sure ample gown and gloves are available at the resident's door.
 - Designate someone on every shift to replenish supplies.
 - Ensure that staff understand that they must perform hand hygiene even with glove use.
 - Dedicate items for care of residents who are in contact precautions, such as dedicated blood pressure cuff, single use stethoscope, or IV pole.
- o Limit the use of fluoroquinolones and other broad spectrum antibiotics to conditions for which they are medically necessary, as these can increase the likelihood of a person developing CDI.
 - Work with the medical director, pharmacists, and providers to assess antibiotic use in the facility, including the use of Fluroquinolones.
 - Know the frequency/indications for antibiotic use by medical providers in your facility.
 - Develop and implement standard protocols for assessing residents who are suspected of having infections.
 - Standardize information provided during communication between nursing staff and clinicians to improve how antibiotics are used - to support prescribers in making the best decisions and to not apply pressure for antibiotics (e.g., SBAR communication tool).
 - Establish processes for an antibiotic "time out" where the prescriber considers if it is appropriate to stop, streamline, or shorten the duration of the drug.
- o Focus on environmental cleaning and disinfection with attention to high-touch surfaces when caring for persons with CDI.
 - Establish environmental cleaning policies and procedures.
 - Clean and disinfect rooms, surfaces, and shared equipment using bleach or Environmental Protection Agency-approved, disinfectant products to kill *Clostridium difficile* spores.
 - Conduct daily cleaning and disinfection of high touch surfaces such as bedside table, toilet, and sinks. Ensure that other high touch surfaces are not being overlooked, such as bed rails, bedside tables, blood pressure cuffs, call buttons, IV poles, curtain rails, bed frames, door handles, etc.
 - Dedicate single use, disposable equipment for residents with *Clostridium difficile* when possible. Make sure these items aren't re-used by other residents.
 - Ensure that all shared equipment is being cleaned and disinfected between resident use; be clear about who is cleaning certain pieces of equipment/who has responsibility; maintain log books of cleaning/disinfection for large equipment like wheelchairs, transport stretchers, etc.
 - Audit cleaning practices and provide feedback to staff.
- o Vigilantly monitor persons that have had CDI for relapsing disease (people are particularly vulnerable in the first month following infection).
 - Establish a system for staff to know who has had a *CDI*.
 - When discussing a resident's signs and symptoms with a provider, nurses should include information about the resident's recent *CDI* and antibiotic use
- Notify other healthcare facilities (e.g., hospital, emergency department, home health agency, other nursing facility) about CDI when residents transfer.

Prevent other infection events

See section titled "[Prevention of all types of infections.](#)"

ABUSE AND NEGLECT

Prevent abuse, neglect, mistreatment, injuries of unknown source, and misappropriation of resident property

Foundational and Ongoing Education Topics to Consider

- Educate all staff on resident rights, autonomy and choice, and the right to be free from abuse, neglect, and misappropriation of property.
- Provide clear expectations for staff to behave professionally.
- Educate all staff on how to react and respond appropriately to resident behavior.
- Educate all staff, residents, families, and volunteers, with regular updates, on policy of zero tolerance of abuse and neglect, what constitutes abuse and neglect including sexual misconduct/assault, recognition of abuse and neglect, and mandatory reporting policies.
- Educate staff on how to monitor for, react, and follow-up on resident to resident altercations
- Educate all staff on policies and procedures for reporting allegations of abuse or neglect.
- Ensure all staff demonstrate competency in recognizing potential or actual abuse and neglect and reporting policies.
- Use case examples from your own organization during vulnerable adult staff training.
- Ensure that staff are appropriately trained for their jobs.

Pre-Admission Practices

- Assess for history of abuse, neglect, mistreatment, and injuries.
- Inquire if the resident has any current bruises, skin tears, injuries, etc.

Admission Practices

- Conduct skin inspection to identify areas of injury (e.g., bruises, signs of trauma, skin tears).
- Talk with residents and families about how they can expect to be treated, and how to reach out if any person treats them in an unacceptable manner (e.g., snapping at them, rough or unwarranted handling, skipping cares, rushing through meals).
- Talk with resident about any concerns about abuse from potential visitors.
- At daily stand up/IDT meeting review new residents and any concerns related to potential abuse/neglect.
- Add any concerns about potential abuse and neglect, or potential to leave the building unescorted or without letting staff know, 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).
- Identify residents that may be at risk for abuse or neglect (e.g., residents with dementia, with a tendency to be aggressive, or with desire to leave the building unescorted or without letting staff know) and develop an individualized prevention plan.

Ongoing Care Practices and Monitoring

- Develop policies and procedures for reporting allegations of abuse or neglect and appropriate communication of investigation results.
- Establish policy for 'escalation' and notification of reports of abuse and neglect, so that the administrator and other key leaders are immediately aware.
- Establish policies to monitor visitor access, and implement safety restrictions when appropriate.
- Staff monitor for behaviors that may provoke a reaction by residents or others (e.g., verbally aggressive behavior, physically aggressive behavior, sexually aggressive behavior, touching other people's property, going into other's rooms/space, resistive to cares).
- Ensure adequate supervision of all staff and volunteers.
- Set the expectation that all staff are looking out for each other and for all residents to prevent abuse and neglect.
- Watch for any signs of frustration or burnout among staff as they can represent a safety risk for physical or emotional harm to residents, and follow-up with staff immediately to provide support.
- Conduct staff background checks prior to staff interacting with residents - No exceptions.
- Ongoing monitoring for safe environment – safe bed, mattress, chairs, equipment, flooring, shower and tub equipment.
- Establish systems, and ongoing monitoring of those systems, to protect residents from any source of burns (e.g., water temp, electrical outlets, any heating source).
- Help residents to not be isolated, as that can put them at risk for abuse, neglect, injury.
- Establish a tracking system for all resident clothing, belongings, and property brought with them to the nursing home.
- Implement policies and procedures to ensure residents' laundry is not lost (e.g., label clothing, wash, dry, fold, and package each resident's laundry separately) – keep logs/audits to help identify trends.
- Implement policies for follow up on any reports of missing property.
- Conduct rounding and talk with resident using specific questions around care, dignity, staff relationships and visitor relationships.
- Support staff in balancing resident choice and privacy with organizational strategies and actions meant to prevent abuse, neglect, injuries, and misappropriation of property. Establish processes to guide staff in working with residents to balance rights and freedoms with staff recommendations.
- Ensure facility has social media/technology policy and procedures in place to protect residents, families, and staff from misuse of technology (e.g., resident information/photos being disclosed in an unauthorized manner).
- Work with community, regional, state partners to review substantiated reports of abuse and neglect in nursing homes. Ask within your team, could this happen in our building?
- Share information with residents and staff on the role of and contact information for ombudsman.
- Be responsive to ombudsman when they ask to collaborate on solving resident/family concerns in the organization; view concerns with a systems viewpoint – what can be done to prevent recurrence of concerns or complaints.
- Establish and implement policies to prevent, identify, and respond to staff drug diversion (e.g., have a zero tolerance policy; set expectations that employees share information on suspicious behavior; have processes to closely track all narcotics received, used, and not used); carefully monitor resident response to medication; establish policies on follow-up procedures when drug diversion is suspected (e.g., ensure appropriate reporting and investigation, involve the infection prevention, work with law enforcement agencies).

Resources to Consider

- CMS, LTC Survey Pathway, Abuse - <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes.html>
- CMS, LTC Survey Pathway, Neglect - <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes.html>
- National Long Term Care Ombudsman Resource Center, Training Materials: Abuse, Neglect, Exploitation and Misappropriation of Property - <http://ltcombudsman.org/nursing-homes/nh-training-materials>
- CMS, LTC Survey Pathway, Infection Prevention, Control & Immunizations - <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes.html>
- CMS, LTC Survey Pathway, Personal Funds - <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.

APPENDIX A: Need Ideas for Where to Begin? Focus Here First



Establishment of foundational components of a safety culture (leadership, resident and family engagement, committed staff that communicate and work together as a team, and strategies to continuously learn and improve) and staff implementation of specific actions to prevent resident adverse events, harm, abuse and neglect involves many strategies and actions, as described in this Change Package.

A common question is ‘what is most important to focus on first?’ Nursing homes participating in the development of this Change Package provided the following suggestions on priorities for preventing all cause harm for residents. Without focus on these areas, you are putting residents and staff at risk for adverse events, harm, injury, errors, neglect.

Harm Prevention in Nursing Homes: Ideas for where to start.

1. Shore up staffing.

- a. Ensure you have the right people in key positions.
- b. Ensure you have adequate mix and number of staff on the units – use the facility assessment as a guide.
- c. Define the specific competencies and skills needed by your organization in order to ensure staff competence (nursing, therapy, dietary, etc.).
- d. Focus on staff development, training, and continuing education.
- e. Be clear about standards of behavior for staff, have those in writing.
- f. Decrease or eliminate use of pool staff that do not know your residents and organizational processes.
- g. Take care of the staff and build resiliency – happy, stable staff leads to happy, safer residents, and contributes to improved safety.
- h. Partner with local academic organizations and community to enhance nursing assistant training and nursing assistant referral process.
- i. Consider your census and be bold enough to hold admissions in response to staffing issues.

2. Know the residents and their needs and areas of risk; plan care with them.

- a. Leaders and staff must have in-depth knowledge about each resident, anticipate problems and needs.
- b. Work with each resident to set goals and plans of care (balancing resident freedoms with safety).
- c. Ensure that residents receive appropriate care and that care plans are kept up to date.
- d. Make sure all staff have the information they need to provide safe care for the resident.
- e. Identify and address concerns before they become a problem “safety is everyone’s responsibility – if you see something, say something.”
- f. Have a system for staff to share knowledge/best practice for individual resident care plans.

3. Prevent, identify, and address gaps in care.

- a. Establish a consistent admissions process to prevent errors and improve the resident/patient/family experience.
- b. Back each other up – build in multiple, independent checks to ensure there are no gaps in evidenced-based care and treatments, processing and following-up on orders, tests and results, appointments, etc.
- c. Look for gaps from survey results; quality measures; resident, family, and staff feedback and complaints; provider and community feedback; audits.
- d. Address any known gaps in care immediately by improving processes and systems.
- e. Recognize recurring problems as weaknesses or failures of the organization's processes and systems – which leadership has responsibility to address.

4. Promote excellent multidisciplinary team work.

- a. Focus on efficient and effective communication within and across teams.
- b. Provide care, monitor residents and staff, problem solve and make decisions together.
- c. Push decision making to those with the most expertise and those impacted by the processes being discussed.
- d. Model and set expectations that all team member voices are valued and trusted.

5. Provide tangible leadership engagement with staff and residents.

- a. Ongoing frequent rounding and presence on the units/floors and during meetings, interacting with and supporting residents, families, staff, providers, ensuring care safety risks are identified and addressed, ensuring adequate and safe physical environment, equipment, supplies.
- b. Pay close attention to what is happening on the front lines that impacts direct care – looking for any actual or potential areas of failure in care or environment – no area too big or too small to address.
- c. Articulate, model, and recognize high expectations around safety, quality, rights, choice, and respect – care for residents as family, safety is everyone's role.
- d. Use resident and family quality of life/satisfaction surveys as a tool for conversation in resident and family councils.

6. Ensure excellent, competent, available, continuous care—onsite.

- a. Medical: Providers with expertise in geriatrics, wound care, psychiatry, podiatry, dental, vision (all areas of specialty needed for your population).
- b. Psychosocial: Staff with expertise in activities, spiritual, social, recreational aspects of well-being.
 - i. Offer individualized and group activities to promote psychosocial, physical, and spiritual health, and prevent loneliness, isolation, depression, and boredom which can lead to harm and injury.
 - ii. Use staff with specialized training (social services, etc.) to help formulate strong behavioral plans/interventions.

APPENDIX B: Foundational Components that Support Staff in Carrying Out Actions to Prevent Harm (Adverse Events, Abuse, and Neglect) for Nursing Home Residents



Suggested Interventions for Implementation

Leadership, resident and family engagement, committed staff that communicate and work together as a team, and strategies to continuously learn and improve are the bedrock or foundation to set an organization up to succeed in preventing all causes of harm. When this foundation is in place, the strategies discussed in the body of this Change Package can be implemented effectively.

The sections below provide details from the nine nursing homes on what they do to establish this foundation. The high-performing nursing homes visited focused on continuously improving strategies and actions in each component - they are not intended to be a once and done checklist. Reflect on the actions your organization has in place and identify opportunities for improvement or refinement.

Leadership	Resident and Family Engagement	Committed Staff, Teamwork, and Communication	Continuous Learning and Improvement
<ul style="list-style-type: none"> • Establish a vision for safe care • Set high expectations for staff for customer service and safety-minded actions • Develop and support a culture of trust, transparency, open communication, respect, teamwork, and inclusion • Engage the Board of Directors and corporate leaders in building a culture of safety • Select and develop leaders and staff that are accountable for safety • Develop a just and fair culture 	<ul style="list-style-type: none"> • Involve resident/patient/family in goal setting, developing, and updating care plans and daily decisions • Promote open communication among the care team and the resident/patient/family • Engage residents and families in organization improvement efforts 	<ul style="list-style-type: none"> • Create a highly effective and collaborative multidisciplinary team • Develop an infrastructure that promotes teamwork and communication • Provide tools and resources that support teamwork, communication, and resident monitoring 	<ul style="list-style-type: none"> • Identify staff learning needs to provide safe care • Provide orientation and opportunities for ongoing education to support learning • Evaluate effectiveness of education • Set organizational goals for safe care by using benchmark data • Identify and track measures to understand organizational performance • Identify and prioritize areas to improve • Use a quality improvement process

Provide Leadership to Establish a Culture of Providing Quality, Safe Care

Establish a vision for safe care and prevention of all causes of harm to residents, balanced with resident autonomy, independence, and dignity

- Educate yourself on components of a safety culture (e.g., root cause analysis, human error, a just and fair culture that focuses on improving organizational systems and processes, failure modes and effects analysis, using data and measurement to drive decisions, teamwork, quality improvement, staffing structure, staff safety).
- Articulate the goal of preventing all causes of harm - "If we prevent 98% of harm and injury, is that acceptable? What about the other 2% - how can we prevent that?" - or the goal of working towards reliability in care.
- Establish processes that encourage and support staff in having discussions with residents and families about balancing resident safety and autonomy and freedoms – learning about residents' preferences, having conversations about risks and benefits with resident choices and supporting them in informed choices. Find ways to promote safety with the choices residents have made. "We find ways to not say 'no' to residents, and focus on how to make their choice be as safe as possible." For example, do not limit mobility in residents that are at risk to fall; rather, support their mobility and take precautions to prevent injuries.
- Use resident and family councils as forums for open dialogue, education, and transparency.

Set high expectations for leaders and staff for customer service and safety-minded actions, and model those behaviors and actions

- Articulate expectations for customer service - "They are the reason we are here," "They deserve dignity and respect," "If we do not meet/exceed their expectations, they will not come back or refer others, we will be out of business," and "Work with the IDT to find ways not to say 'no' to residents."
- Be clear about expectations for following policies and procedures, avoiding short cuts, keeping the team informed about issues or concerns, and responsibility of all staff to watch residents - "Provide care as if the family is watching you at all times."
- Prioritize safety (of all – residents, families, staff, and visitors) during meetings (daily stand up or shift huddles; weekly care meetings, Q&A/QAPI meetings) - ask what has or could go wrong and how can we prevent, detect, or mitigate problems?
- Engage leaders to be present and engaged during meetings that discuss safety: preparing for the meeting and setting expectations for others to be prepared with new and follow up information - "Everyone comes to the meetings and gives 100%, so that makes me also want to give my very best."
- Identify safety topics to cover and discuss during daily meetings. Leaders ask questions and probe to support learning and follow up. Suggestions for topics to cover:
 - New residents, to prepare for a safe admission.
 - Residents with changes in condition.
 - New medications being used.
 - New equipment being used.
 - Staffing issues (e.g., numbers or new or inexperienced or mix of staff, staff safety)
 - Residents with similar names.
 - New procedure(s) being implemented.
 - Any distractions occurring today.
 - Review incidents, near misses/good catches.
 - Follow up from items discussed yesterday.
 - Each department share their top safety concerns for the day – what could fail or go wrong.
 - "We have no secrets, we talk about everything, nothing is too big or too small to cover."
 - "We can't solve problems we don't know about."

- Allow time for discussion of safety issues or risks – become aware of issues in a much earlier stage, focus on getting to the bottom of issues raised.
- Encourage staff to report safety concerns - “See something, say something.” Acknowledge and reward that behavior - “Safety is everyone’s job.”
- Leaders stay alert to what is happening on the front lines and proactively identify potential safety issues/risks.
- Ensure that staff have adequate supplies to meet resident needs. Ensure adequate handwashing stations, including sinks and soap so that staff have convenient access to wash hands before and between caring for residents.
 - Ensure that staff workload includes and supports time for handwashing (so that staff do not feel they are too busy to wash hands).

Develop and support a culture of trust, transparency, open communication, respect, teamwork, inclusion so all are working towards resident/patient safety

- Be available (be out and about and talk to all staff and residents) and approachable (smile, show interest and energy, call people by their names).
- Be respectful of all staff and residents; encourage, listen to, value, and follow up on input from all staff and residents on safety issues/concerns.
- Model the way with open communication and teamwork – pitch in and help every day, show that you are one of the team working towards the resident’s goals and safety.
- Implement leadership rounding to assess for safety concerns and invite selected staff to join.
- Actively participate in environment/safety rounds, wound rounds, on specific teams (e.g., focusing on mobility/fall prevention, psychotropic medication use).
- Have a presence and engage with staff, residents, families on all shifts, weekends, holidays, paying attention to safety needs at all times while honoring residents' rights and preferences.
- Be open and share information about safety concerns – what are the safety concerns and how is the organization addressing those concerns, how are the concerns being measured and what progress is being made.
- Employ an open door policy - leader’s offices located in areas where all residents and staff pass by with doors open.
- Develop relationships with other community partners and healthcare entities (e.g., local hospitals, provider groups, clinics, assisted living facilities, home health agencies) to understand each other’s challenges, initiatives, and needs. Establish work groups to share best practices, regulatory needs, and to identify and carry out cross setting quality improvement initiatives.

Engage the Board of Directors and corporate leaders in building a culture of safety

- Select board members with expertise in safety – that will invest in staff training and competencies.
- Include positions on the board for resident/family members.
- Provide ongoing education for board members on safety (e.g., clear vision, components of a culture of safety, focus on preventing events. Not just investigating after the fact, consider having them see things firsthand – spending time with direct care staff).

- Provide opportunities for external education and networking for board members; ask them to come back and share what they learned with the board and leaders.
- Focus on safety data and measurement at board meetings.
- Share data in a way that brings resident harms/injuries to life – talk about people not as numbers, share stories about impact.
- Describe and discuss safety issues with the board.
- Discuss opportunities to form relationships with other community partners and healthcare entities, recognizing that provision of safe care requires coordination and collaboration across communities and healthcare settings.

Select and develop leaders and staff that are accountable for safety

- Hire leaders that have knowledge and experience in improving safety while honoring residents' rights and preferences.
- Provide opportunities for leadership training and networking in safety.
- Consider certified medical director, certified activities professionals.
- Model the way for leaders in how to assess for safety risks, how to talk with residents, families and staff to identify safety risks, how to get to the bottom of issues and follow up so that they do not recur.
- Identify future leaders and provide opportunities for them to learn about and use safety and safety culture.
- Think about succession planning - identify talent for key leadership positions to ensure that gaps are adequately covered.

Develop a just and fair culture, that addresses systems issues that contribute to errors and harm

- Educate yourself and key leaders on implementation of a just and fair culture.
- Develop and implement strategies to balance individual accountability and organizational accountability to design and improve safe systems.
- Create a culture where staff, residents, and families feel safe to speak-up about reporting of adverse events, near misses, and safety concerns.
- Use a reliable method to evaluate and understand the choices made by individuals in the organization in a fair and just way.
- Determine the right course of action that aligns with the situation to protect against future human error, address or remove what is driving potentially risky behavior, and discipline for reckless behavior.
- Focus on improving systems and processes that protect staff, residents, and families from errors, harm and injury.
- Educate on and practice safety 'time outs' (e.g., consider the use of time outs before procedures to verify correct resident and procedure, after antibiotic starts, before transfers to other settings)
 - Use a guide to facilitate the time out, such as the five rights with medication administration (i.e., right resident/patient, drug, dose, route, time).
- Educate on, promote, and model the use of 'CUS'- encouraging staff to use key trigger words such as I am 'Concerned,' 'I am Uncomfortable,' or this may be or is a 'Safety' issue, in order to raise team awareness of safety concerns.

Engage the resident and family into care so they receive desired and safe care

Involve resident/patient/family in goal setting, developing, and updating care plans

- Work with the resident and family to identify their goals and the plan of care very early on – during preadmission visits, and during the first 24-48 hours after admission.
- Implement shared decision making (an approach where clinicians and patients/residents share the best available evidence when faced with the task of making decisions, and where patients/residents are supported to consider options, to make decisions that include consideration for their preferences).
- Establish individual goals of care with the resident and family as appropriate. This should include at a minimum, their preference for cardiopulmonary resuscitation, and their desired focus for medical treatment, for example, care that is aimed at reversing illness or comfort focused. Ensure this information is reflected in the care plan, updated on a regular basis, and communicated with all staff and all providers to make sure that the resident's goals for their care are honored.
- Share and update the care plan with the resident and family.
- Conduct 15-minute check-ins with residents for first 24 hours.
- Share information on safety practices and precautions.

Promote open communication among the care team and the resident/patient/family

- Administrator and department heads conduct 'meet and greet' with all new residents.
- Leadership (e.g., administrator, DON, activities, dietary, housekeeping, maintenance, social service) rounding on all residents daily.
- Establish a consistent admissions process that fully engages the resident/patient/family to prevent errors, omissions, gaps in care and to improve the resident/patient/family experience.
- Invite resident and family (with resident permission) to care conferences.
- Staff participation at care conferences, listen to the resident and family and other staff, and follow up on questions or issues raised.
- Discuss care options, when appropriate, for palliative care and hospice care.
- Invite families to support care as desired by the resident and family, ask them questions.
- Provide training and education to residents and families on diseases, conditions in terms understandable to them. Don't assume they are up-to-date because they came in with the condition.
- Define and share expectations for the role of each staff member in answering call lights.
- Implement systems to rapidly respond to call lights – have back up plan if nursing assistant or nurse needs to assist the resident and they are not immediately available.
- Ensure leadership accessibility (e.g., administrator, DON provide card/cell phone number to residents and families).
- Implement system to notify family and staff of any changes in condition.
- Implement a system to communicate with residents and families when safety issues occur.
- Do not restrict visiting hours for family (sharing that residents and roommates do need rest time and providing spaces where family members can congregate during resident rest times).
- Encourage and enable residents and families to speak up if they notice a risk to safety.

Engage residents and families in organization improvement efforts

- Share information and report progress about quality improvement work in the organization with residents and families.
- Ask for their input on areas to improve and ideas for improvements.
- Include them on performance improvement teams if that is their preference.
- Support the resident council, share and seek input on safety issues.

Support staff commitment, interdisciplinary teamwork and communication to prevent and mitigate errors and resident injury and harm

Create a highly effective and collaborative multidisciplinary team

- Ensure that key staff positions are filled with competent persons: administrator, director of nursing, nursing managers and supervisors, staff development/education, infection prevention and control nurse, medical director, dietary/nutrition services, therapy, wound/ostomy/continence nurse, activities, housekeeping, maintenance.
- Use staff 'extenders' when appropriate, such as aides or volunteers that can be present with and observe residents/patients during busy/vulnerable times such as shift change, mealtimes, and early evening hours.
- Ensure adequate staffing levels so that staff have time to complete their work, can have 'eyes' on the residents/patients at all times, can recognize and be responsive to their needs or changes in condition.
- If pool or float staff are required, ensure they have been thoroughly orientated to the organization before reporting to work, and are supervised throughout their shift and confirm understanding of expectations.
- Build team commitment to work together to help each other and to solve problems – "the only way we can succeed is by working together."
- Set expectations for and model teamwork and problem solving as an IDT team – bringing decision making down and around to the people with the most expertise in the topics and processes being discussed.
- Build staff resiliency to promote stable staffing - "Our longevity means we know our residents well and we know and respect each other. Long and lasting relationships lead to a high level of commitment to quality and safety."
- Partner with local academic organizations and community to enhance nursing assistant training and hiring referral process.
- Identify and implement evidence-based clinical guidelines and care pathways to guide staff in caring for residents with certain medical conditions (e.g., congestive heart failure, coronary artery disease, COPD, chronic renal failure, dementia, diabetes, orthopedic surgery).
- Establish and use palliative care and hospice programs for applicable residents.
- Consider educating and training key staff in having "End of Life" or "Life Sustaining Treatment Preferences" conversations to assure competency and consistent messaging. Train them as your home's "Facilitators." When changes in treatment preferences are received, assure timely communication, documentation and physician orders that reflect these changes. Train all charge staff on continuing goals of treatment conversations when a significant change occurs, so they are prepared to review and assure that we are following resident's wishes.

Develop an infrastructure that promotes teamwork and communication and resident monitoring

- Set up communication strategies that support obtaining and sharing information about a resident prior to admission and in the immediate period following admission.
- Establish a consistent admissions process to prevent errors, omission and gaps in care.
- Implement consistent or permanent assignment (with nursing assistants and other staff such as nurses, dietary, housekeeping, maintenance) so that staff truly get to know the resident and can rapidly detect subtle changes in condition.

- Implement communication processes to ensure all staff have the information they need for each resident/patient that they are caring for (change of shift report from nurse to nurse, nursing assistant to nursing assistant, nurse to nursing assistant, shift huddles, unit huddles, care plan, nursing assistant care card, electronic care tracker prompts).
- Implement a process (e.g., morning stand up, 24-hour report) for all leaders to be kept updated on at least a daily basis of any potential or new admissions, changes in resident condition, or resident's at risk of changes in condition (e.g., those with medication changes, at risk for falls, changes in ability to perform ADL's). Establish the expectation that department leaders then share with their staff so that everyone is in the know about the resident's needs.
- Set up meeting structures and processes that support problem prevention, identification, mitigation and system redesign when necessary (e.g., daily stand up, clinical, Medicare, medical staff, department, safety, QA&A/QAPI, resident council, staff resiliency, pain, infections, skin, ethics).
- Set expectations that providers and other disciplines communicate openly and respectfully, to provide education and build team knowledge as part of treatment plan development and implementation.
- Share care plan with external clinicians (e.g., surgeons, primary care physicians, specialists) as appropriate.

Provide tools and resources that support staff commitment, teamwork, communication, and monitoring of residents

- Establish processes for and expectations to use communication tools that:
 - Track and monitor incidents, near misses/good catches.
 - Support nurse to provider communication to ensure timely and relevant communication is shared, such as through the use of SBAR communication tools.
 - Communicate changes in resident/patient condition immediately, such as the use of the 'stop and watch' tool.
 - Support effective handoff communication, to enhance information exchange during transitions in care.
- Provide tools that support ongoing continuous communication across staff (e.g., medical records, pagers, two way radios, cell phones to call/text, email).
- Establish process to 'escalate' reports of changes in resident condition, when needed, to ensure rapid assessment and response.
- Reward staff for recognizing and reporting changes of condition – show appreciation at various times (e.g., during huddles on all shifts, department meetings, morning stand-up meetings, shift change reports, evening and night shift meetings).
- Consider the role of using visual cues to support safety (e.g., laminated cue cards included on name badge lanyards, for FIRE response procedures or for communication framework such as AIDET, or magnets or symbols that are used to indicate residents at risk).

Continuously learn and improve organizational approaches to quality and safe care

Identify staff learning needs to provide safe care during orientation and ongoing

- Define the specific competencies and skills needed by your organization in order to ensure staff competence and establish process to keep updated.
- Develop a competency checklist for licensed nurses and nursing assistants, and a plan to assess competencies skills regularly.
- Do not assume that licensed or certified staff are competent in all required skills needed to support individual resident conditions and diagnosis, check their competency (e.g., check their blood pressure measurement, auscultation of lung sounds).
- Have the staff development/education leader attend meetings such as the following, listening for opportunities for training and education: daily safety meetings, department meetings, unit/floor meetings, QA&A/QAPI meetings, and pending admissions.

Provide orientation and ongoing education to support learning

- Use a variety of methods to provide education, taking into account concepts of adult learning, such as interactive short sessions, role play or simulations, videos or online learning modules.
- Use all resources available to support education, e.g., corporate experts, vendors, providers with varying specialties, trade organizations, QIN-QIO, Medicare Learning Network, students (e.g., OT and PT students provide in services to staff on what they are learning).
- Provide opportunities for staff to attend outside conferences and meetings, be proactive about getting up to speed on emerging care needs of the community.
- Participate in pilot projects and studies (e.g., partner with researchers, health department, community groups).
- Ensure staff receive education on:
 - Safe resident/patient handling (e.g., transfers, ambulation, care of fragile skin, to avoid injuries and resulting bleeding).
 - Prevention, recognition and treatment of delirium.
 - Medications that are being used by the residents and the risks, benefits, and side effects of each.
 - Everyone's responsibility to answer call lights and to keep 'eyes' on the residents.
 - Infection prevention and control.
 - Communication and team work (e.g., TeamSTEPPS).
 - Diversity and inclusion.
 - Prevention and reporting of abuse, neglect, maltreatment.
- Provide staff education on palliative care and hospice care – indications for, key principles and practices or these types of care.
- Have the staff development/education leader out and about on the units/floors, checking in with staff on education and training needs, providing just in time training and support as needed.
- Establish a process to ensure that learning occurs about new evidence-based best practices to promote safety in LTC (attendance at conferences, review of literature, discussions with providers, relationships with universities).
- Promote a learning culture – establish expectations and opportunities for continuous learning for all staff, through formal training, or through just in time learning and problem solving together.

- Encourage all staff to ask questions and provide a safe environment for that to occur (non-punitive and no verbal or nonverbal indication that questions are seen as ignorant, incompetent or negative).
- Leaders ask questions about errors, near misses, or opportunities to take advantage of those as learning opportunities - “Help me understand more about... why is this not working... who does it better...which methods work best?”
- Empower staff through leadership and emerging leader training or workgroups.

Evaluate effectiveness of education

- Use pretest and posttest measurements.
- Ask for feedback from staff on how to improve the education.
- Use teach back techniques - “In order to assess how well we did with teaching, tell me ...”
- Don’t assume that everyone remembers and assimilates into practice everything covered during training. Look for multiple opportunities to reinforce training.

Set organizational goals for safe care by using benchmark data

- Establish, with the board, leaders, and team, goals for the organization related to safety.
- Consider setting goals around available quality measures related to safety and harm prevention such as pressure injuries, urinary tract infection, readmissions, antipsychotic medication use.
- Identify benchmark data that are available for the nation, state, region, or corporation to assist in setting goals. Determine if the goal is to be, for example, in the top decile or quartile, better than the average, or to improve by a certain relative or absolute percentage.

Identify and track measures to understand organizational performance, and provide feedback

- Identify sources of data and measures to assess:
 - o Resident, family, staff, provider, partner (e.g. ACO), volunteer, community feedback related to safety issues.
 - o Resident, family, staff satisfaction.
 - o Staff safety culture survey.
 - o Audit findings (e.g., independent, corporate, Joint Commission, SNFQAPI, EQUIP for quality) related to safety issues such as med pass, infection prevention practices including hand hygiene, personal protective equipment, environmental cleaning.
 - o Clinical quality outcomes.
 - o Quality of life.
 - o Infections (including maps of infections in the building).
 - o Antibiotic use overall, by unit, by provider, by drug/drug class, by diagnosis.
 - o Antibiotic use in residents with infections that met and did not meet McGeer criteria.
 - o Opioid use.
 - o Readmissions (root cause analysis findings for all readmissions).
 - o Utilization, Length of Stay.
 - o Incidents.
 - o Vulnerable Adult reports.
 - o Near misses/good catches.
 - o Medication errors.

- o Adverse events related to medications (such as delirium from opiates or psychotropic medication, excessive bleeding, hypoglycemia or ketoacidosis, drug toxicities, electrolyte imbalance, altered cardiac output related to cardiac/blood pressure medication).
 - o Medications that were held or are on hold.
- Provide feedback on audit findings to providers and staff.

Identify and prioritize areas to improve

- Consider areas identified through: dashboard(s), incidents, near misses, unsafe conditions, feedback from staff, families, residents, survey deficiencies.
- Establish a process to review real time data and monthly, quarterly, or annual data.
- Compare measures to organization goals for the measures and to benchmarks (what results are the high performers getting).
- Look for and communicate trends that indicate opportunity for improvement.
- Establish a method to prioritize opportunities - give opportunities related to safety high priority.

Use a quality improvement process to plan, implement, evaluate changes made

- Educate yourself and staff on quality improvement methodologies that will be used in the organization (e.g., LEAN, Plan-Do-Study Act/PDSA Cycle, or Model for Improvement).
- Involve those who care about the process being improved.
- Consider chartering a multi-disciplinary improvement team for recurring problems or that involve multiple departments.
- Assign a leader for performance improvement teams that has been trained in quality improvement and managing projects.
- Provide tools that support the team in conducting prompt event investigation (e.g., post fall huddle tools, near miss reports, incident reports, root cause analysis tools such as the 5 whys diagram or fishbone diagram).
- Define how you will know if the changes made will result in an improvement – how will you know if they were implemented as intended and if they were effective and had an impact.
- Ensure that the actions/changes being implemented address the root causes.
- Proactively seek out change ideas from the literature, staff, residents, families, partner organizations, trade or professional organizations, community partners, by sending staff on site visits to other nursing homes to learn from them.
- Use pilot tests or small tests of change when testing new interventions to make sure they work as intended, before rolling out to all staff.
- Communicate with all staff what the new expectations are, why the changes are being made and how the changes will make a difference.
- Monitor that changes are made as intended, and having the desired impact. If changes are not made as intended, explore the barriers that staff are encountering and work to address those barriers. If changes are not having the intended impact, continue with the PDSA process.
- Be transparent with data – with all staff, residents, families, community partners – “We can manage what is measured and known.”
- Share dashboards/data that visually display organizational measures and progress in break rooms or other shared areas where informal conversation occurs.
- Pay attention, support, monitor the work being done and the results of quality improvement teams - “What leader’s measure, control, and pay attention to gets improved.”

APPENDIX C: Office of Inspector General (OIG) Report Findings



Adverse Events in Skilled Nursing Facilities: National Incidence Among Medicare Beneficiaries¹

- An estimated **22 percent** of Medicare beneficiaries experienced adverse events during their Skilled Nursing Facility (SNF) stays.
- An additional **11 percent** of Medicare beneficiaries experienced temporary harm events during their SNF stays.
- Physician reviewers determined that **59 percent** of these adverse events and temporary harm events were clearly or likely preventable.
- Much of the preventable harm was attributed to substandard treatment, inadequate resident monitoring, and failure or delay of necessary care.
- Over half of the residents who experienced harm returned to a hospital for treatment, with an estimated cost to Medicare of \$208 million in August 2011. This equated to **\$2.8 billion** spent on hospital treatment for harm caused in SNFs in FY 2011.

Nursing Facilities' Compliance with Federal Regulations for Reporting Allegations of Abuse or Neglect

- It is both required and expected that nursing facilities will report any and all allegations of abuse or neglect to ensure resident safety.
- **85 percent** of nursing facilities reported at least one allegation of abuse or neglect to OIG in 2012.
- **76 percent** of nursing facilities maintained policies that address federal regulations for reporting both allegations of abuse or neglect and investigation results.
- **61 percent** of nursing facilities had documentation supporting the facilities' compliance with both federal regulations under Section 1150B of the Social Security Act.
- **53 percent** of allegations of abuse or neglect and the subsequent investigation results were reported, as federally required.

¹ Levinson, Daniel (2014, February). Adverse Event in Skilled Nursing Facilities: National Incidence Among Medicare Beneficiaries. Retrieved from <https://oig.hhs.gov/oei/reports/oei-06-11-00370.pdf>

² Levinson, Daniel (2014, August). Nursing Facilities' Compliance with Federal Regulations for Reporting Allegations of Abuse or Neglect. Retrieved from <https://oig.hhs.gov/oei/reports/oei-07-13-00010.pdf>

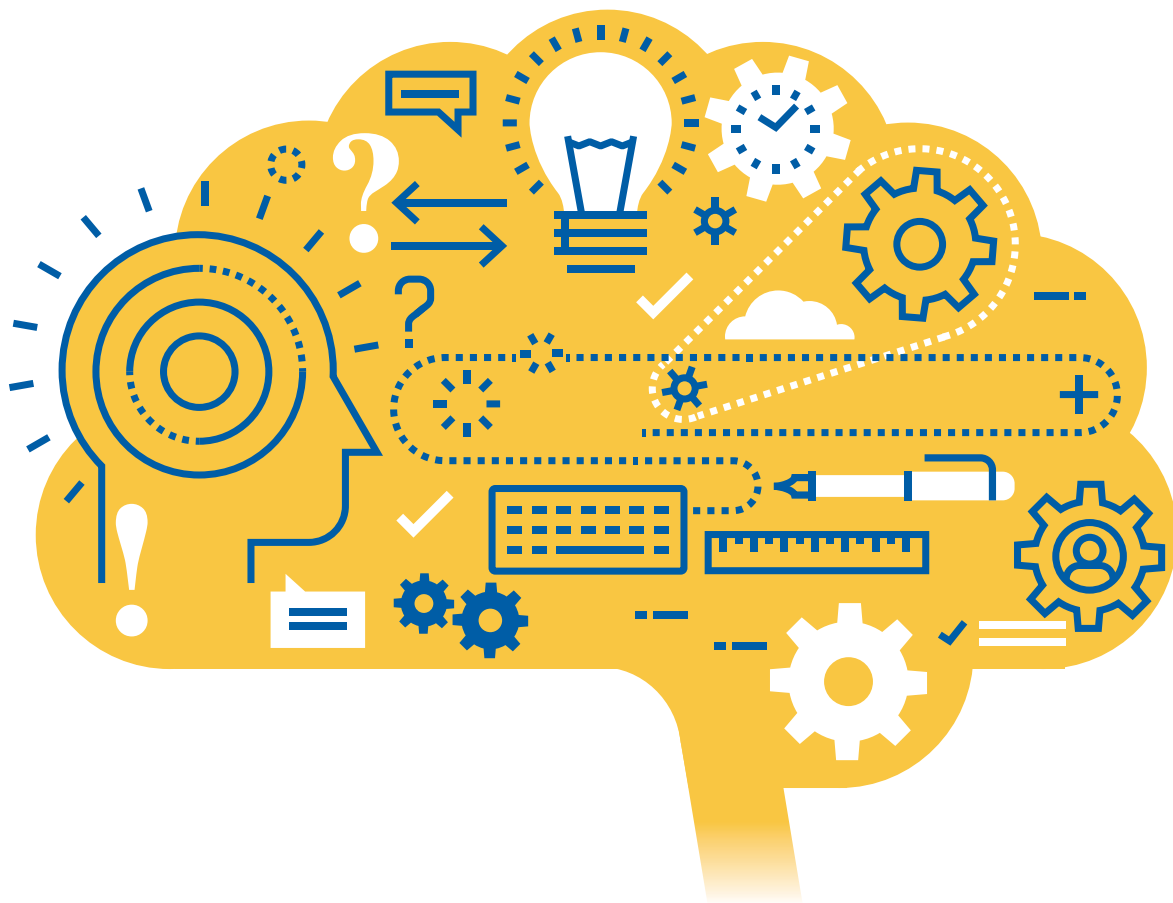
APPENDIX D: TEAM MEMBERS TO CONSIDER AND RESOURCES FOR QUALITY IMPROVEMENT EFFORTS



It is important to recognize that all staff and disciplines have a role in and should be included in organizational efforts to enhance resident safety.

Consider involving the following key members or champions when working to improve systems and processes to prevent the following types of harms. This is not a comprehensive list, rather, it is meant to generate ideas for who to involve in quality improvement work in these areas. It is important to include people that are involved in and care about the processes being reviewed and potentially revised.

A list of resources to support effective quality improvement teams is also provided.



	Nursing	Administrator	Med Director	Att phys/pract	Pharmacist	Mental Health Services Provider	Anticoag clinic	Dietary	Social Services	Activities/Rec	Housekeeping	Maintenance	Therapy	Wound specialist	Receptionist	Inf Preventionist	Infectious Disease Specialist
Medication-induced delirium or other changes in medical condition	x		x	x	x	x											
Excessive bleeding due to medication (anticoagulants)	x		x	x	x		x										
Constipation, obstipation, and ileus related to medication	x		x		x			x		x			x				
Fall or other trauma with injury related to resident care	x	x	x	x	x			x		x	x	x	x				
Pressure and other skin injury such as skin tears	x	x	x					x		x	x		x	x			
Exacerbations of preexisting conditions resulting from an omission of care	x		x														
Acute kidney injury or insufficiency secondary to fluid maintenance	x		x	x				x		x							
Fluid and other electrolyte disorders (e.g., inadequate management of fluid)	x		x	x	x			x		x							
Venous thromboembolism, deep vein thrombosis (DVT), or pulmonary embolism (PE) related to resident monitoring	x		x	x				x		x			x				
Elopement (residents that leave the building without staff knowledge)	x	x							x	x	x	x			x		
Infections	x	x	x		x			x		x	x	x	x	x		x	x
Abuse and neglect	x	x							x	x	x	x	x		x	x	

Resources to Support Effective Quality Improvement Teams

Agency for Healthcare Research and Quality, TeamSTEPPS® Long-Term Care

TeamSTEPPS is an evidence-based framework to optimize team performance in order to provide quality and safe care. It is based on team structure and four teachable-learnable skills: communication, leading teams, situation monitoring and mutual support. Curriculum materials, tools and resources are available. <https://www.ahrq.gov/teamstepps/longtermcare/implement/implguide.html>

Barbara Bowers, Kim Nolet, et. al, Implementing Change in Long-term Care, A Practical Guide to Transformation

This manual was designed to assist organizations, and the staff who work there, to implement changes that will improve care quality. <https://www.nhqualitycampaign.org/qualityImprovementMethods.aspx#modal>

CMS, QAPI at a Glance

This is a step by step guide to implementing Quality Assurance and Performance Improvement (QAPI) in a nursing home. <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/Downloads/QAPIAtaGlance.pdf>

Health Resources and Services Administration, Improvement Teams

This module provides an overview of the characteristics and benefits of an improvement team for quality improvement (QI) work, the functioning roles and responsibilities of the various team members, and the stages of growth as a team evolves into a cohesive entity with a single focus. The module also provides strategies, tools, and additional resources that experienced QI teams use to become effective and successful in achieving their aims. <https://www.hrsa.gov/sites/default/files/quality/toolbox/508pdfs/improvementteams.pdf>

Institute for Healthcare Improvement, How to Improve

The science of effective improvement, including forming the team and examples of effective teams, is discussed. <http://www.ihl.org/resources/Pages/HowtoImprove/ScienceofImprovementFormingtheTeam.aspx>

Isabella Geriatric Center and Cobble Hill Health Center, Working Together for Continuous Improvement, A Guide for Nursing Home Staff

This manual provides practical guidance to nursing homes exploring a journey toward enhancing person-centered care. <https://www.isabella.org/Isabella/News/Article.aspx?id=cff0ab07-d3b1-4645-a81f-953b1d80337f>

John W. Moran, Top 10 Problems Encountered By Quality Improvement Teams

Major problems that team encounter (e.g., lack of an aim statement and team charter, not having the right people on the team, lack of a problem solving process), along with solutions, is discussed. http://www.phf.org/phfpulse/Pages/Top_Problems_Encountered_By_QI_Teams.aspx

Planetree and Picker Institute, Long Term Care Improvement Guide

This guide is a practical resource intended to support continuing care communities in their efforts to bring about culture change. <https://planetree.org/wp-content/uploads/2015/05/LTC%20Improvement%20Guide%20For%20Download.pdf>

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