How-to Guide:

Improving Transitions from the Hospital to Skilled Nursing Facilities to Reduce Avoidable Rehospitalizations

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Acknowledgements

Note: Definition of "Skilled Nursing Facility"

For purposes of this How-to Guide and in IHI's work to improve care transitions, "skilled nursing facility" (SNF) is used as an umbrella term representing several different types of post-acute care settings in which individuals receive care in the community, including the following:

- Nursing home

- Skilled nursing care center

- Long-term care facility

- Rehabilitation facility

- Post-acute care facility

- Complex or convalescent care centers (in Canada)

The term "skilled nursing facility" was identified by past participants in IHI programs as the most consistent and accurate way to describe these care settings, recognizing that these organizations offer a variety of services in addition to skilled nursing care such as short- and long-term care, palliative care, and rehabilitation.

Institute for Healthcare Improvement
How-to Guide: Improving Transitions from the Hospital to Skilled Nursing Facilities to Reduce Avoidable Rehospitalizations

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I. Introduction

Delivering high-quality, patient-centered health care requires crucial contributions from many clinicians and staff across the continuum of health care, including the effective coordination of transitions between providers and care settings. Poor coordination of care across settings too often results in rehospitalizations, many of which are avoidable. Importantly, working to reduce avoidable rehospitalizations is one tangible step toward the dramatic improvement of health care quality and the experience of patients and families over time.

The Institute for Healthcare Improvement (IHI) has a substantial track record of working with clinicians and staff in clinical settings and health care systems to improve transitions in care after patients are discharged from the hospital and to reduce avoidable rehospitalizations. IHI gained much of its initial expertise by leading an ambitious idealized design initiative called [Transforming Care at the Bedside (TCAB)](). Funded by the Robert Wood Johnson Foundation, TCAB enabled IHI to work initially with a few high-performing hospital teams to create, test, and implement changes that dramatically improved teamwork and care processes in medical/surgical units. One of the most promising TCAB innovations was improving discharge processes for patients with heart failure. (See the *[TCAB How-to Guide: Creating an Ideal Transition Home for Patients with Heart Failure]()* for a summary of the "vital few" promising changes to improve transitions in care after discharge from the hospital and additional guidance for front-line teams to reliably implement these changes.)

In 2009, IHI began a strategic partnership with the American College of Cardiology to launch the Hospital to Home (H2H) initiative. The goal is to reduce all-cause readmission rates among patients discharged with heart failure or acute myocardial infarction by 20 percent. H2H aims to create a rapid learning community where people can share their knowledge and best practices to reduce cardiovascular-related hospital readmissions and improve the transition from inpatient to outpatient status for individuals hospitalized with cardiovascular disease.

IHI led a groundbreaking multistate, multistakeholder initiative called [STate Action on Avoidable Rehospitalizations (STAAR)](). The aim was to dramatically reduce rehospitalization rates in states or regions by simultaneously supporting quality improvement efforts at the front lines of care while working in parallel with state leaders to initiate systemic reforms to overcome barriers to improvement. Since 2009, STAAR's work in Massachusetts, Michigan, and Washington has been funded through a generous grant provided by The Commonwealth Fund, a private

foundation supporting independent research on health policy reform and a high-performance health system.

The Case for Improving Transitions from the Hospital to Skilled Nursing Facilities to Reduce Avoidable Rehospitalizations

Hospitalizations account for nearly one-third of the total $2 trillion spent on health care in the United States.[1,2] Experts estimate that 20 percent of Medicare hospitalizations are rehospitalizations within 30 days of discharge.[3] According to an analysis conducted by the Medicare Payment Advisory Committee (MedPAC), up to 76 percent of rehospitalizations occurring within 30 days in the Medicare population are potentially avoidable.[4] Avoidable hospitalizations and rehospitalizations are frequent, potentially harmful and expensive, and represent a significant area of waste and inefficiency in the current delivery system.

Approximately 20 percent of Medicare beneficiaries are discharged from the hospital to a skilled nursing facility (SNF). Poorly executed care transitions negatively affect patients' health, well-being, and family resources as well as unnecessarily increase health care system costs. Continuity in patients' medical care is especially critical following a hospital discharge. Research highlights that nearly one-fourth of Medicare beneficiaries discharged from the hospital to a SNF are readmitted to the hospital within 30 days, costing Medicare $4.34 billion in 2006.[5] Adding to this problem is the financial environment within which rehospitalizations occur. Although preventable rehospitalizations negatively impact the health of patients, current reimbursement structures do not necessarily incentivize efforts to reduce these rehospitalizations. Payment reform is actively underway, however, and changes, such as shared savings through accountable care organizations (ACOs) or financial penalties for high rehospitalization rates through Medicare, will likely assist with realigning many incentives across the health care system to support optimal patient care.

How-to Guide: Improving Transitions from the Hospital to Skilled Nursing Facilities to Reduce Avoidable Rehospitalizations

Based on the growing body of evidence and IHI's experience to date in improving transitions in care after a hospitalization and reducing avoidable rehospitalizations, IHI has developed a conceptual framework or roadmap (Figure 1) that depicts the interventions and elements of care needed to dramatically improve care of patients after they are discharged from the hospital.

Figure 1: IHI's Roadmap for Improving Transitions in Care after Hospitalization and Reducing Avoidable Rehospitalizations
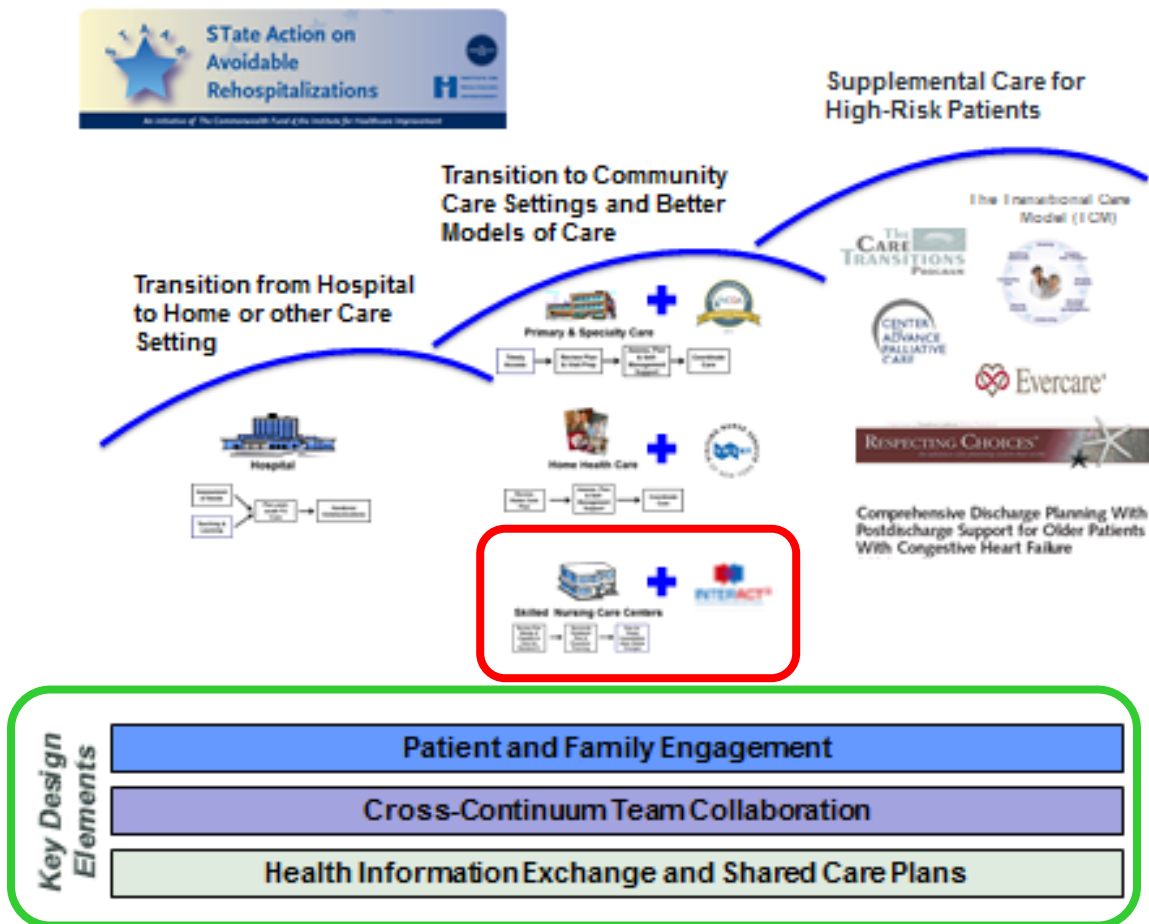
The transition from the hospital to post-acute care settings has emerged as an important priority in IHI's work to reduce avoidable rehospitalizations. Transitions in care after hospitalization (and after stay within post-acute care facilities) involve both an improved transition out of the hospital as well as an activated (i.e., patient is "actively received" by the next care setting) and reliable reception into the next setting of care. The key changes described in this How-to Guide (depicted in the red box in Figure 1) support SNF-based teams and their community partners in co-designing and reliably implementing improved care processes to ensure that residents have a safe, effective transition into — and are actively received by — the SNF. Guidance for leveraging the key design elements to improve care transitions (depicted in the green box in Figure 1) is also included in this How-to Guide.

In addition to this How-to Guide to create an ideal transition from the hospital to a SNF, IHI also provides separate How-to Guides for hospitals, clinical office practices, and home health care agencies:

- *How-to Guide: Improving Transitions from the Hospital to Community Settings to Reduce Avoidable Rehospitalizations*

- *How-to Guide: Improving Transitions from the Hospital to the Clinical Office Practice to Reduce Avoidable Rehospitalizations*

- *How-to Guide: Improving Transitions from the Hospital to Home Health Care to Reduce Avoidable Rehospitalizations*

It is important to note that SNFs may also look to create "better models of care" within their own setting to impact patient rehospitalizations. The *How-to Guide for Improving Transitions from the Hospital to Community Settings to Reduce Avoidable Rehospitalizations* includes four key changes that may be adapted and applied to skilled nursing as the patient transitions from the SNF to long-term care or home. The key changes are:

1. Perform an Enhanced Assessment of Post-Hospital Needs

2. Provide Effective Teaching and Facilitate Enhanced Learning

3. Ensure Post-Hospital Care Follow-up

4. Provide Real-Time Handover Communications

These key changes have been adopted by hospitals across all three states participating in the STAAR initiative. Hospitals report that their improvements have resulted in a better experience for patients and have impacted 30-day readmission rates in specific patient populations. In addition, we have learned that the key changes described above are being successfully adapted and implemented by skilled nursing facilities involved in STAAR.

Another important resource for providing more evidence-based care in the skilled nursing setting is the Interventions to Reduce Acute Care Transfers (INTERACT) Quality Improvement Program.[6] The INTERACT Quality Improvement Program is designed to assist front-line staff in early identification, assessment, communication, and documentation about acute change in resident condition. It includes clinical and educational tools and strategies for use in everyday

practice in skilled nursing and long-term care facilities. SNFs across the country have implemented the INTERACT Quality Improvement Program and many facilities have been able to significantly reduce avoidable hospitalizations using these resources.[7]

IHI recommends that SNFs consider each of the process changes included in these resources to improve care transitions to and from SNFs and to reduce avoidable rehospitalizations. These changes are depicted below in Figure 2.

Figure 2: IHI and INTERACT Resources for Improving Transitions to/from SNFs
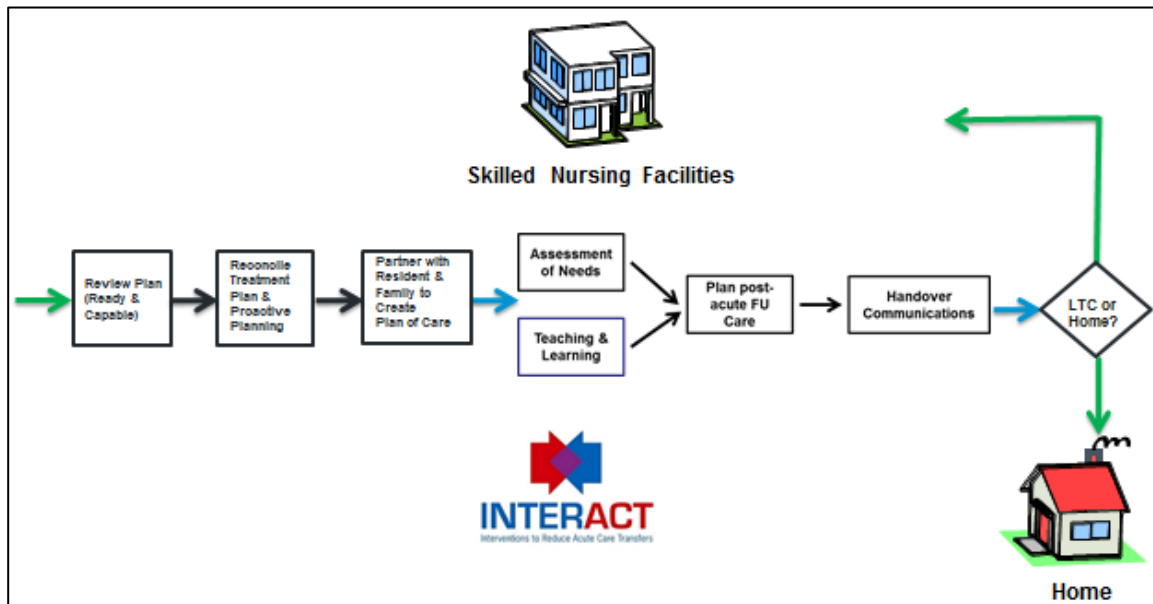
II. Key Changes

The *How-to Guide: Improving Transitions from the Hospital to Skilled Nursing Facilities to Reduce Avoidable Rehospitalizations* outlines three recommendations (Figure 3): 1) ensure that SNF staff are ready and capable to care for the resident; 2) reconcile the treatment plan and proactively plan for condition changes; and 3) engage the resident and their family or caregiver in a partnership to create an overall plan of care.

Figure 3: Key Changes to Complete the Transition to Skilled Nursing Facilities

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1. Ensure That SNF Staff Are Ready and Capable to Care for the Resident

A. Confirm understanding of resident's care needs from hospital staff.

B. Resolve any questions regarding the resident's status to ensure fit between resident needs and SNF resources and capabilities.

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2. Reconcile the Treatment Plan and Proactively Plan for Condition Changes

A. Re-evaluate resident's clinical status since transfer. Reconcile the treatment plan and medication list based on an assessment of the resident's clinical status, information from the hospital, and past knowledge of the resident (if he or she was previously a resident).

B. Make a plan for timely consult when resident's condition changes.

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3. Engage the Resident and Their Family Caregivers in a Partnership to Create an Overall Plan of Care

A. Assess the resident's and family caregivers' desires and understanding of the current plan of care as well as any possible next care settings.

B. Reconcile the care plan developed collaboratively with the resident and family caregivers.

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1. Ensure That SNF Staff Are Ready and Capable to Care for the Resident

> **Recommended Changes:**
>
> *1A. Confirm understanding of resident care needs from hospital staff.*
>
> *1B. Resolve any questions regarding resident transition status to ensure fit between resident needs and SNF resources and capabilities.*

Flawless transitions across care settings require that all care providers share a common understanding of the resident's condition. Prior to transfer, an accurate and thorough assessment of a resident's needs based on standard criteria contributes to an effective transition plan. This crucial step reduces the likelihood of a rehospitalization within hours or days.

The crux of this intervention is to clearly specify what information SNF providers need in order to care for a resident who is transitioning from hospital care to the SNF setting. Providers at the SNF need a complete view of the resident's clinical and functional status to assume responsibility for the resident and appropriately plan his or her care.

How to identify your typical failures and opportunities for improvement:

- [IHI Observation Tool for the Transition to Skilled Nursing](#) (How-to Guide Resources, page 67) – Use this tool to understand opportunities for improving the resident's transition from the hospital to the skilled nursing facility.

- If you are currently part of a cross-continuum team or actively partnering with acute care hospitals, consider using the [IHI Diagnostic Tool](#) for reviewing recent readmissions from the SNF to the hospital.

- [INTERACT Quality Improvement Tool](#) for Review of Acute Care Transfers (How-to Guide Resources, page 71) — Use this tool to understand opportunities for improvement associated with acute care transfers.

Recommended Changes

1A. Confirm understanding of resident care needs from hospital staff.

Clinicians in the SNF, who are accountable for the execution of the care plan following the resident's transfer from the hospital, should be involved when the inpatient care team formulates the transfer and transportation plan. When the transfer plan is being formulated, and based upon the standardized transfer criteria, providers at both the hospital and SNF should complete the following steps:

- Collaboratively plan and communicate the details of the resident's transfer via phone or in person, including the expected time of transition. This communication should occur prior to the patient's transition to SNF.

- Review the resident's current clinical and functional status.

- Ensure understanding of care needs and details required to implement immediate care needs (e.g., some SNFs cannot access new medication orders after 7 PM).

    o Have SNF and hospital staff use common transfer communication techniques, such as SBAR or read-back-and-confirm, to confirm mutual understanding.

- Compare the resident's current status to the transfer criteria and resolve discrepancies and questions (e.g., the transfer criteria require a stable oxygenation status, but the resident's oxygenation levels have decreased over the past six hours).

- Revise the standardized transfer criteria and transfer process as needed, as clinicians from both the hospital and SNF learn improved transfer processes.

- Obtain the name and contact information for the consulting physician in the hospital so that when questions arise the SNF staff knows who to contact for clarification.

Tips for Testing:

- Treat each transfer as an opportunity to learn new ways to care for residents. After each transfer, the SNF nurse should debrief (either via live conversation or virtually) with the transferring nurse from the hospital to identify the elements of the transfer that worked well and those that did not. The cross-continuum team can then test changes to address problems identified during the debrief on the next transition.

- SNF staff may use the INTERACT Nursing Facility Capabilities List to confirm the facility has the capabilities to care for the resident prior to their admission. Counties in Washington State have created and regularly update laminated posters with the capabilities and provider phone numbers of all SNFs and long-term care facilities in the county. These posters are provided to hospital emergency department and care manager personnel.

Figure 4: INTERACT Nursing Facility Capabilities List (How-to Guide Resources, page 72)

1B. Resolve any questions regarding the resident's clinical status to ensure fit between resident needs and the SNF resources and capabilities.

Gaps between the resident's anticipated clinical status at the time of transfer and the resident's actual status places the resident at risk for incomplete care at the SNF. When such discrepancies occur, SNF leaders may be unsure of whom to contact in the hospital to understand the root cause of the discrepancy and propose solutions. An effective cross-continuum team can mitigate this barrier. Open communication ensures a productive long-term relationship between care settings and better patient outcomes.

Avoiding such gaps requires providers to do the following:

- Identify and discuss any concerns regarding the resident's clinical status prior to transfer to avoid care concerns that the SNF may not be equipped to address.

- Identify gaps between the resident's clinical status and the transfer criteria:

  o Collaboratively determine whether the resident's clinical status places that resident at risk for complications after transfer.

- o Resolve any concerns about the resident's status prior to transfer or defer transfer if a stable, safe transfer cannot be ensured.

- o Ensure that needed medication, treatment, and equipment (e.g., access to dialysis, wound care, or rehabilitation) are available at the SNF.

Tips for Testing:

Start small. With the next resident to be transferred, observe problems or surprises that occur with the transfer (e.g., missing information that would have fostered better care). Determine whether the problems are due to gaps in the transfer criteria or gaps in the information provided by hospital providers. Convey information about problems or surprises immediately to the identified hospital contact and to cross-continuum team members so they can learn about the issues and use the resulting information to redesign the transfer process.

2. Reconcile the Treatment Plan and Proactively Plan for Condition Changes

> **Recommended Changes:**
>
> *2A. Re-evaluate the resident's clinical status since transfer.*
>
> *2B. Reconcile the treatment plan and medication list based on an assessment of the resident's status, information from the hospital, and past knowledge of the resident (if he or she was previously a resident).*
>
> *2C. Make a plan for timely consult when resident's condition changes.*

When the resident arrives at the SNF, the care team's attention should shift from needs associated with the immediate transfer to updating the overall care plan, including clinical treatment as well as plans to address functional, social, and emotional needs. An essential component of updating the care plan should be reconciling previous acute care interventions with the resident's ongoing care needs. Once these needs are reconciled, the SNF staff must ensure that all members of the care team are adequately educated, enabled, and confident to carry out their part of the care plan.

How to identify your typical failures and opportunities for improvement:

- The AHRQ-funded Medications at Transition and Clinical Handoffs (MATCH) Program, developed by Northwestern Memorial Hospital in Chicago, is a comprehensive toolkit for improving the medication reconciliation process across the continuum of care.

- The medication reconciliation guide in *A Systems Approach to Quality Improvement in Long-Term Care: Safe Medication Practices Workbook* (How-to Guide Resources, page 73). Pages 168-174 of the Workbook are dedicated to medication reconciliation in long-term care facilities.

- Use the INTERACT Medication Reconciliation Worksheet for Post-Hospital Care (How-to Guide Resources, page 77).

Recommended Changes

2A. Re-evaluate resident's clinical status since transfer.

Re-evaluate the resident's clinical status based on information from the hospital and use of a standard treatment plan. Use a standard SNF assessment process and incorporate changes in the resident's plan of care. The treatment and overall care plan should address the following:[8-10]

- Resident's expected clinical course throughout their stay;

- Resident and family caregivers' values and priorities relative to the resident's care, including advanced illness plans;

- Medication and dietary restrictions;

- Cognitive status, including resident and family caregivers' ability to engage in Teach Back techniques;

- Skin and wound care;

- Recommended activity level and limitations;

- Treatment;

- Need for provider follow-up with contact information for those providers who are to be contacted.

- Psychological state;

- Cultural background; and

- Access to social and financial resources.

2B. Reconcile the treatment plan and medication list based on an assessment of the resident's clinical status, information from the hospital, and past knowledge of the resident (if he or she was previously a resident).

Reconcile the resident's medication list, including medications taken prior to hospitalization but subsequently discontinued. Note: In a recent study, one of every five hospitalized patients experienced adverse events due to inadequate medical care after leaving the hospital. This gap is likely to also apply to patients transferring to SNFs. Confusion about medication administration, follow-through, and access are the largest contributors to rehospitalizations.[11-13]

Reconcile any other aspects of the treatment plan, including mobility assistance, therapies, and advance directives, specifying which interventions are to be added, deleted, or modified in the SNF.

Tips for Testing:

- Involve the resident and their family caregivers when gathering information about the resident's medication and care history.

- Written handover communication is often insufficient. Set up a process for direct verbal communication with the hospital clinical provider to allow for dialogue about the resident's clinical status as well as opportunities for inquiry and clarification about the plan of care. A personal phone call or "warm handover" communication between clinical providers establishes a mechanism for bidirectional communication to better understand the resident and family caregiver needs.

- Ensure that the correct medications have been ordered and that their dose, frequency, and route are clearly specified in the care plan and are consistent with the resident's post-acute treatment needs.

- Consider the use of a tool or document, such as a personalized medication list, that does not require the resident or caregiver to rely on memory.

- Work with the hospital to ensure that the names and contact information for the consulting physician in the hospital and specialty providers (i.e., cardiac, ortho) are included in the discharge summary so that when questions arise the SNF knows who to contact for clarification.

- Identify the essential aspects of care required and ensure that these are listed in the care plan. For example:

  o Daily weights and ranges triggering intervention for residents with heart failure;

  o Diabetes management and glucose alert levels that signal the need for a change in medication management;

  o Diet;

  o Test results follow-up;

- o Pressure ulcer presence, staging of ulcers, and required supplies;

- o End-of-life wishes across settings; and

- o Scheduling timely follow up with appropriate providers and services (e.g., dialysis, physical therapy, cardiologist, and surgeon) and associated transportation.

2C. Make a plan for timely consult when resident's condition changes.

Timely access to providers who know the resident well and can respond appropriately to changes in the resident's condition is a challenge for most SNFs. This lack of access to providers often leads to reliance on the emergency department (ED) for further assessment and immediate care to the resident, which often ultimately results in admission to the hospital. Clinical teams have tested alternatives that contribute to better care without unnecessary transfer to the ED or hospitalization. Having a plan in place for responding to possible condition changes is a critical first step to reducing hospitalizations.

Tips for Testing:

- The INTERACT program has a number of resources to assist with planning for changes in condition, including change in condition file cards, early warning tools, and care pathways. These tools are available at www.interact2.net/tools.html.

- Test using the INTERACT Stop and Watch Tool with the resident's family caregivers and all SNF staff (including Certified Nursing Assistants, housekeepers, facility hair stylists, and others who regularly interact with residents) to assist with ongoing monitoring of resident's condition. Be sure to provide feedback to staff about any actions taken based on their observations to reinforce use of the tool.

- Test a rapid response team or "e-ICU" approach. Many hospitals are successfully using a rapid response team (also known as a medical emergency team) comprising hospital clinicians with critical care expertise to rush to a patient's bedside at the first sign that the patient's condition may be deteriorating. Consider adapting this concept for skilled nursing by identifying a clinical team available remotely (i.e., by phone) to guide SNF caregivers when a resident's condition deteriorates.

3. Engage the Resident and Their Family Caregivers in a Partnership to Create an Overall Plan of Care

> **Recommended Changes:**
>
> *3A. Assess the resident's and their family caregivers' desires and understanding of the plan of care as well as any possible next care settings.*
>
> *3B. Reconcile the care plan developed collaboratively with the resident and family caregivers.*

Rather than being passive participants, residents and their family caregivers are key partners in ensuring optimal transitions from sites of care. The experiences of care teams working to improve transitions from hospitals to home demonstrate that active partnerships can lead to better care and outcomes. (For more information on improving transitions to home, see *How-to Guide: Improving Transitions from the Hospital to Community Settings to Reducing Avoidable Rehospitalizations*.) Experts in the SNF field affirm that a cooperative partnership between providers and residents along with their family caregivers can create a trust-based relationship and improve understanding of the care goals, which can help avoid rehospitalization. Common understanding between SNF staff and residents and their family caregivers regarding expected outcomes, especially those related to end-of-life care, can help avoid the situation in which SNF staff must resort to rehospitalization because of a lack of resident-determined care guidelines.

Experience shows that when SNF staff interview the resident and their family caregivers prior to transfer to clarify expectations, it helps build relationships and reduces confusion regarding care outcomes. SNF staff note that skillful conversations to ensure clarity about palliative or hospice care and the use of detailed advance directives are key success factors. Enlisting residents and family caregivers as a consistent part of the care team helps to create clear care plans and support improved outcomes.

How to identify your typical failures and opportunities for improvement:

- Use the INTERACT Advance Care Planning Tracking Form (How-to Guide Resources, page 78) to document that advance care planning discussions are taking place with residents and family caregivers.

- Consider adapting and using the Care Transitions Measure (CTM), developed by Eric Coleman and colleagues, to assess the quality of care coordination experienced by residents being discharged from the SNF.[14]

- Consider using the Patient Activation Measure (PAM), developed and validated by Judith Hibbard and colleagues for understanding patient "activation," to determine and track the engagement of residents and families in your facility's care.[15]

- Utilize the Teach Back technique to improve teaching and assess resident or family caregiver understanding. More information on Teach Back, including web-based learning modules, is available at Always Use Teach-back! (www.teachbacktraining.com).

Recommended Changes

3A. Assess the resident's and family caregivers' desires and understanding of the plan of care as well as any possible next care settings.

- Obtain information about the resident's and family caregiver's desires and understanding of the plan of care from prior providers.

- Identify expectations about short- and long-term clinical outcomes at the SNF and review options for care beyond the immediate post-acute time frame, including long-term care and return to home.

- Discuss desires regarding detailed advance directives beyond "do not resuscitate" (DNR) and "do not hospitalize" status, including end-of-life care determination and the use of life-sustaining efforts.

- Evaluate the resident's and family caregivers' understanding of the overall care plan.

- Provide the resident and family caregivers with the name of a SNF care team member with whom they can easily follow up if questions or concerns arise.

Tips for Testing:

- Use effective communication techniques such as Teach Back[16] to assess clarity and understanding during conversations with the resident and family caregivers.

- When indicated, partner with palliative care and hospice care team members for family care plan conversations. For example, Hebrew SeniorLife has instituted automatic

palliative care consults (with consent) for residents who meet certain pre-determined criteria such as three or more hospitalizations in the past six months.[17]

- Use a tool to assist with the end-of-life portion of the care plan such as the MOLST/POLST tool.[18,19]

- Learn from leading programs about advance care planning systems. Respecting Choices is a community-wide effort spearheaded by Gundersen Lutheran Medical Foundation to stimulate and support constructive ongoing conversations. The intent is a process of communication that helps individuals and their families understand choices for future health care; reflect on personal goals, values, and religious or cultural beliefs; and talk to physicians, health care agents, and other loved ones as needed. The program has resulted in a significant number of community members who are clear about their advance care plan, thus relieving the burden of any one provider or care setting to address these complicated issues. Respecting Choices is now a statewide model in Wisconsin, Kansas, Ohio, North Carolina, South Carolina, and Wisconsin, and is the end-of-life model for Australia.[20] More information is available at http://respectingchoices.org.

- Use the Five Wishes framework for guiding conversations with residents and family caregivers about care preferences. An online version of the framework is available at www.agingwithdignity.org/five-wishes.php.

- Use the INTERACT Communication Guide (Parts 1, 2, and 3) for tips and suggested language to initiate and carry out conversations with residents and family caregivers when there has been a decline in health status. The Communication Guide is available at www.interact2.net.

- Consider developing individualized care plans or "i-care" plans with residents to shift care planning conversations from having a clinical voice to one that reflects the resident's perspective. Information about creating individualized care plans is available through a variety of web-based sources. The Pioneer Network, a not-for-profit organization that advocates for person-centered long-term care, is one source of tools and resources for creating a more resident-focused culture within your facility. Information about The Pioneer Network is available at http://pioneernetwork.net/.

3B. Reconcile the care plan developed collaboratively with the resident and family caregivers.

Revise the overall care plan with the appropriate provider(s), including providers of primary care, specialty care, palliative care, and hospice care (when indicated), based on a partnership with the resident and their family caregivers.

- Communicate with the appropriate provider(s) to revise the clinical treatment plan and to ensure information about prognosis communicated to the resident and family caregivers is consistent with the information communicated in other settings.

- If appropriate, partner with staff from palliative care and hospice services to ensure thorough reconciliation of a care plan that complements SNF care.

III. Design Elements

The design elements or principles for improving care transitions and coordination of care after patients are discharged from the hospital include: 1) patient and family caregiver engagement, 2) cross-continuum team collaboration, and 3) health information exchange and shared care plans. These cross-cutting principles are catalysts for the successful implementation of the key strategies and changes to improve care transitions and to reduce avoidable rehospitalizations.

Patient and Family Caregiver Engagement

Engagement with patients and their family caregivers takes many forms, including partnerships in treatment and shared care planning, improving care across the continuum, redesigning care and service processes, and optimizing communication between health care providers and patients and their family caregivers.

At the annual IHI National Forum in 2002, Don Berwick asked, "Are patients and families someone to whom we provide care? Or, are they active partners in managing or redesigning their care?" If we truly want to transform care processes, patients and family members know where the "white spaces" between services and locations of care exist, and they are in the best position to identify opportunities for improvement. Patients and family caregivers should be engaged in choices, planning, and decisions about their care. We also need them engaged in the redesign of care processes if we are to achieve patient- and family-centered care.

The challenges for health care leaders "Start Before You Are Ready!" has been stated by Jim Anderson, former Chairman of the Board at Cincinnati Children's Hospital and Medical Center. The Cincinnati Children's Hospital Readiness Assessment for Partnering with Patients and Families to Accelerate Improvement may be adapted and used to improve care transitions (see Figure 5).

Figure 5: Readiness Assessment (How-to Guide Resources, page 79)

At St. Luke's Hospital in Cedar Rapids, Iowa, the Patient and Family Advisory Council (FAC) for Heart Care Services is dedicated to helping the service fulfill its mission: "To give the health care we'd like our loved ones to receive" and to support the principles and practice of family-centered care. Functions of the FAC include providing input and feedback on ways to improve the following:

- Patient and family experience;

- Delivery of services for patients and families;

- Educational programs, classes, and written materials for patients;

- Program development such as for the transitions in care team;

- Education/orientation of hospital associates;

- Facility design or renovation;

- Reviewing accomplishments and setting goals; and

- Recruiting new members.

For more information on partnering with patients and families to transform care, refer to:

Partnering with Patients and Families to Design a Patient- and Family-Centered Health Care System: A Roadmap for the Future. Institute for Healthcare Improvement. Available at www.ihi.org/knowledge/Pages/Publications/PartneringwithPatientsandFamilies.aspx.

Tools for Advancing the Practice of Patient- and Family-Centered Care. Institute for Patient- and Family-Centered Care. Available at www.ipfcc.org/tools/downloads.html.

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Cross-Continuum Team Collaboration

Cross-continuum team collaboration is a transformational hallmark of the STAAR initiative that promotes the paradigm shift from site-specific care to patient-centered care, where the focus is on the patient's experience over time. Understanding mutual interdependencies between care settings, the hospital-based teams co-design care processes with their community-based clinicians and staff and collaborate to improve patients' transition out of the hospital and reception into community settings of care. This collaborative teamwork reinforces that readmissions are not solely a hospital problem.

Leadership for successful cross-continuum teams varies. Some are initiated by hospital executives who invite representatives from community-based sites of care and community agencies that receive their patients to learn and test changes in collaboration with hospital-based teams. Quality Improvement Organizations (QIOs) are bringing together hospitals, nursing homes, patient advocacy organizations, and other stakeholders in community coalitions, many of which have a community-based leader. Regardless of the initial leadership, the purpose of the cross-continuum team collaboration is to work together toward a common goal to

co-design care transition processes that keep patients safe during transitions between care settings and to coordinate the care of patients.

The cross-continuum team should meet regularly to facilitate communications and collaboration, assess progress, remove barriers to progress, and support the improvement efforts of front-line teams in all clinical settings. In the STAAR initiative, a few key roles for cross-continuum teams are emerging and are delineated below.

Oversight Role

- Identify opportunities and establish aims to improve care transitions.

    o Surface failures and diagnose systemic gaps in care transitions, and identify and/or test new ideas;

    o Review and analyze the readmission data and data about patient and family experiences;

    o Complete periodic diagnostic reviews of cases where patients have been readmitted to engage all clinicians and staff in the community and to continually learn about opportunities for improvement; and

    o Create a common aim and look at linkages of processes where cooperation is required.

- Build capability to partner with patients and family caregivers.

    o Add patients and family caregivers to the cross-continuum team to enhance the focus on patient and family experiences and to enable their participation in improving care processes.

- Build capability and capacity in partnering across organizational boundaries.

    o Develop mutual familiarity with the characteristics and needs of each setting by having members from the cross-continuum team visit each others' sites to observe patient care processes during transitions (e.g., hospital and home care nurses shadow each other in the hospital and during home visits); and

       o   Rotate the location of team meetings between the different sites.

Below are descriptions of how two organizational leaders established strong cross-continuum partnerships with skilled nursing facilities within their communities. Each was successful at forging relationships based on a foundation of collaboration and trust.

- *Example #1: Through review of its data, Skagit Hospital in Washington State became aware of a high rate of readmission to the hospital for patients discharged to SNFs. The hospital care management director knew that she could not impact this problem without partnering with her SNF colleagues. She invited four area SNFs (those representing 95 percent of transfers to the hospital) to participate in a meeting at the hospital. In preparation for this first meeting, she asked the SNF representatives to email their top ten barriers to a seamless transition. At their first meeting, those attending prioritized the identified barriers according to two dimensions — high/low cost and high/low impact. Through this exercise, the group set three priority areas of focus for working together to reduce readmissions from SNFs. Workgroups with representatives from multiple disciplines and settings were convened to identify and test changes related to each of the priority areas of work. In order to establish mutual understanding of the different environments in which shared patients receive care, the hospital care management director orchestrated shadowing experiences — SNF nurses observed the discharge process within the hospital and hospital nurses observed the admission process within the SNF. This foundation of understanding has led to better co-design of the processes that impact the care transitions of patients.*

- *Example #2: The administrator of Stafford Healthcare at Ridgemont in Kitsap County, Washington, understood early on the value of shared learning and partnership across the continuum of care to reduce unnecessary resident admissions to the hospital. By reaching out to hospital quality leaders and fellow SNF administrators, she was able to establish buy-in for a collaboration to reduce readmissions across the county. A cross-continuum steering committee comprising representatives from the hospital, skilled nursing, home health, primary care, and hospice continue to meet monthly to identify existing opportunities to improve care transitions and set priorities for cross-continuum improvement efforts. In addition, all SNF administrators and directors of nursing in the county meet monthly to co-design and collaboratively test changes for improving the delivery of care within skilled nursing, with the goal of standardizing best practices*

across Kitsap County. SNF staff are invited to the hospital monthly to discuss specific cases of residents who were readmitted in order to identify possible failures during the hospital-to-SNF transfer or gaps in communication among cross-continuum clinical providers.

Portfolio Management

- Review the comprehensive results and progress over time and support the work of front-line clinicians and staff in the hospital, office practice settings, home health care, and skilled nursing facilities in the co-design and implementation of processes to improve transitions in care.

- Manage a portfolio of community-wide improvement initiatives and review progress of each initiative. Examples of community-wide initiatives include:

  - Create universal handover forms/formats to improve communication and coordination of patient care among all clinical settings;

  - Develop a common evidence-based patient education approach in all clinical settings, for example, health literacy strategies such as Teach Back (see www.teachbacktraining.com);

  - Create universal teaching materials for the most common clinical conditions for use in all clinical settings; and

  - Create universal self-management tools to be used in all clinical settings to support patients and family caregivers.

- Collaborate with payers and post-acute care providers to determine eligibility criteria for intensive care management and how to determine the clinical provider who is "in charge of coordinating care" for various patient populations (Care Transitions Intervention, APN Transitional Care, HF Clinic, Patient-Centered Home, Evercare, etc.).

Health Information Exchange and Shared Care Plans

Health information technology (HIT) and the systems to enable the exchange of electronic information within and across settings in a community (i.e., interoperability) can have a dramatic effect on the coordination and communication of information among providers and between

providers and patients. While hospitals have had electronic systems to support financial and management systems for a long time, fewer have electronic clinical information systems that support quality of patient care.[21] Other settings across the continuum of care have only recently begun to adapt and implement HIT systems that include clinical information.[22] Recent national initiatives — such as the Health Information Technology for Economic and Clinical Health (HITECH) Act (P.L. 111-5) that has as its goal the adoption of HIT in hospitals and office practices around the country — are helping to accelerate the use of HIT more broadly across the health care system. Some insights about the current and potential impact of HIT on the components of IHI's Roadmap for Improving Transitions in Care after Hospitalization and Reducing Avoidable Rehospitalizations (Figure 1) are addressed in this section of the How-to Guide.

Transition from Hospital to Home

During the hospitalization, the ability of clinicians and staff to complete an enhanced assessment and create a post-discharge care plan can be done more consistently and easily if they have immediate access to information about the patient from a number of sources, including primary care and other community providers as well as from members of the care team within the hospital. Medication reconciliation is more effectively accomplished with shared access to patient records across providers. Information gained about the patient during Teach Back sessions, whether conducted in the hospital or in the primary care office, can become part of a continuous documentation of a patient's and their family caregivers' ability to understand how to take care of the patient with the use of shared information systems. Shared care plans, such as the Patient Powered system developed in Whatcom County, Washington, can be the vehicle for engaging patients in the development of their care plans and also in the active management of their health in an ongoing way. With shared care plans, patients have direct access to their medical information and designate others with whom they want to share the information.

Transition to Community Care Settings

The ability of clinicians and staff in skilled nursing facilities, home health care, and primary care practices to effectively receive the patient following a hospitalization depends on their having access to information about the patient's course of treatment and the care plan developed during hospitalization. The timely transmission of the

hospital discharge summary is often a key roadblock that can be addressed through shared access to the patient's medical record and the key recommendations for follow-up care by the discharging physician.

HIT systems can also play a role in standardizing patient-focused information about the illness and ensuring that the patient receives complementary information across settings and sites of care. In addition, HIT has the potential to capture information on how effectively the patient and family caregivers are able to Teach Back what they are learning, share that information with clinicians across settings, and link engagement strategies to the level of patient activation.

Evidence-Based Care in Community Care Settings (Better Models of Care)

Information technology enables clinicians and staff in all community settings to manage care for their patients by having access to information about medication history, past treatments, outstanding tests, patient and family understanding of and ability to care for the patient, and patterns of hospitalization and ED use. For example, information technology and registries enhance the ability of primary care practices to proactively manage the needs of patients with chronic illnesses and to understand the needs of entire populations of patients with specific clinical conditions.

Supplemental Care for High-Risk Patients

Technology and information systems can be used to provide enhanced care to those at high risk of readmission by enabling not only daily monitoring of key clinical information about the patient, but also daily contact between the patient and his or her care team. For example, a number of approaches to providing supplemental care to high-risk patients combine intensive contact and support with some type of telemedicine.

In spite of the potential that HIT has to impact improvements in transitions in care, there are a number of limitations of current HIT systems, including the lack of connectivity between different HIT systems in different clinical settings. Even within a single care setting such as a hospital, the systems for data exchange are not transparent and do not encompass all of the needed elements. Most hospitals have fragmented care plans by discipline (different ones for MDs, RNs, pharmacists, etc.). While the HITECH Act also provides funding to support the state and regional efforts that will enable the transfer of

electronic data across all settings and sites of care, fully functioning systems are not widespread. The Office of the National Coordinator has released a Request for Information (RFI) on Governance of the Nationwide Health Information Network to a common set of "rules of the road" for privacy, security, and business and technical requirements that will help create the necessary foundation to enable the nation's electronic health information exchange capacity to grow.[23]

In addition to the technical issues that need to be solved, there are other challenges that need to be addressed in order to fully maximize these systems to help providers and patients improve transitions, including better partnership between IT vendors and quality improvement experts and overcoming the conflict between vendor business strategies and the needs of providers within and/or across regions.

IV. Infrastructure and Strategy to Achieve Results

Step 1. Executive Leadership

The Executive Sponsor links improving transitions in care and reducing readmissions to the strategic priorities of the organization. This sponsor provides oversight and guidance to the improvement teams' work. Depending on the size and organizational structure of the SNF, typical Executive Sponsors may include the SNF administrator, director of nursing, or medical director.

When reducing readmissions and improving transitions are a strategic priority, the chances of achieving lasting results increase. These strategic questions may help guide your efforts:

- In what way is reducing the SNF's readmission rate a strategic priority? How can this be leveraged to achieve multistakeholder commitment?

- What initiatives or other projects to reduce readmissions are already underway or planned? How are they aligned?

- What resources and expertise in quality improvement and data analysis will support improvement efforts?

- How will leaders provide oversight and accountability for improvement projects?

- How might competing commitments influence this work?

The Executive Sponsor guides breakthrough performance. IHI's white paper, *Execution of Strategic Improvement Initiatives to Produce System-Level Results,* contains four components to achieve results:[24]

1. Set priorities and breakthrough performance goals;

2. Develop a portfolio of projects to support the goals;

3. Deploy resources appropriate for the aim; and

4. Establish an oversight and learning system to produce desired change.[24]

The Executive Sponsor should also select a Day-to-Day Leader who coordinates project activities, helps foster and lead cross-continuum partnerships, provides guidance to the front-line providers and staff, and communicates progress to the Executive Sponsor on a regular basis. The Day-to-Day Leader is often a nursing director or quality improvement leader.

Step 2. Develop Cross-Continuum Partnerships

A critical part of improving transitions in care is the partnership with other continuum providers to co-design the care transition processes that cut across care settings (for example, developing mutually agreed upon standardized transfer criteria). One way that communities accomplish this work is through convening and/or participating in a multistakeholder team with representatives from across the care continuum, including patients and family caregivers, that provides leadership, energy, ideas, and oversight for reducing readmissions and improving transitions. This multistakeholder group co-designs the processes to improve transitions in care, and identifies and builds "sender" and "receiver" relationships for every step of the patient journey across the care continuum. Collectively, team members explore ideal information flow as the patient moves from one setting to the next. Cross-continuum team membership may include:

- Patients, family caregivers, or other designated caregivers (ideally these caregivers are not retired health care professionals);

- Staff from the SNF, hospital, and other care settings, such as nurse managers, staff nurses, case managers, pharmacists, or quality improvement leaders;

- Executive Sponsors from participating organizations such as directors of nursing, administrators, or other leaders supporting this work;

- Physicians including the SNF Medical Director, hospitalists, primary care physicians, ED physicians;

- Staff from the hospital emergency department;

- Home health care nurses;

- Palliative care or hospice nurses;

- Area agency on aging representatives and representatives from other social services agencies;

- Staff from community-based organizations;

- Pharmacist (hospital, community, and/or other involved pharmacists);

- Emergency Medical Services personnel; and

- Case managers from health plans.

Step 3. Identify Improvement Opportunities

During its first meeting, the cross-continuum or multistakeholder team articulates its aspirations and purpose, develops a plan to manage the improvement portfolio, and clarifies its aim (e.g., to reduce rehospitalizations by 30 percent by October 2013). Early team tasks include making the human connection and building trust among members. Some teams find it helpful to create flow diagrams of their processes, with the intersections between care sites and settings clearly identified. Others actually begin by visiting each others' care sites to observe key processes, which provides an opportunity to observe firsthand what each team member does and identify potential process improvements. Some teams conduct the diagnostic assessment (see Step 3a, below) on five patients and use the findings as a place to begin learning and improving. A review of historic data like readmission rates, transfers from long-term care centers to hospitals, home health urgent visits or acute care hospitalization data, or patient perception data is valuable in setting measureable goals.

Step 3a. An in-depth medical record review of the last five rehospitalizations yields rich information. The Diagnostic Worksheet helps make sense of these findings (Figure 6).

Figure 6: Diagnostic Worksheet (Part 1) (How-to Guide Resources, page 63)

- Interview five patients recently readmitted (ideally, while in the hospital) and their family members. If possible, interview the same patients whose medical records were reviewed. Next, conduct interviews with community clinicians who know the readmitted patient (e.g., physicians, nurses in the skilled nursing facility, home health nurses, etc.). Identify problem areas from their perspective. Transcribe information from these interviews onto Part 2 of the Diagnostic Worksheet (Figure 7).

Figure 7: Diagnostic Worksheet (Part 2) (How-to Guide Resources, page 65)

To learn more about opportunities to improve the transition from the hospital to your SNF, use the IHI Observation Tool for the Transition to Skilled Nursing (Figure 8). An additional recommended resource is the INTERACT Quality Improvement Tool for Review of Acute Care Transfers (Figure 9) to review recent resident transfers to the hospital. This tool identifies opportunities to improve processes related to responding to changes in the resident's condition.

Figure 8: IHI Observation Tool for Transition to Skilled Nursing (How-to Guide Resources, page 67)

IHI Observation Tool for the Transition to Skilled Nursing

Worksheet A: Chart Reviews of Admitted Residents

Conduct chart reviews of the last five residents admitted to your facility from an acute care hospital. Reviewers should be nurses or physicians that are actively involved in reviewing potential new admissions and would have access to screening documents for new admissions. Reviewers should not look to assign blame, but rather to discover opportunities to improve the care of residents.

Question	Resident #1		Resident #2		Resident #3		Resident #4		Resident #5	
Did the SNF admissions nurse or admission coordinator assess and confirm the clinical needs of the resident prior to admission either by visiting the	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

Figure 9: INTERACT Quality Improvement Tool (How-to Guide Resources, page 71)

Quality Improvement Tool
For Review of Acute Care Transfers

INTERACT
Version II.0 Tool

The INTERACT QI Tool is designed to help you analyze hospital transfers and identify opportunities to reduce transfers that might be preventable. Complete this tool for each or a representative sample of hospital transfers in order to conduct a root cause analysis and identify common reasons for transfers. Examining trends in these data with the INTERACT QI Summary Tool can help you focus educational and care process improvement activities.

SECTION 1: Describe Resident Characteristi

Following is an example of a patient story that emerged from one cross-continuum team's diagnostic review near Boston, Massachusetts.

> *Robert, a 66-year-old male, was admitted to the hospital on the Friday before Super Bowl weekend with a bone infection in his previously amputated foot. Robert had undergone surgery to perform a resection of his amputation a few days prior to his hospital admission. Prior to this recent surgery, he suffered from chronic foot ulcers and had three previous surgeries related to these ulcers. He also has complicated polycystic kidney disease (and had a kidney transplant as a result), suffers from cardiac issues (including coronary artery disease), and has a number of other co-morbidities.*

> *While Robert was in the hospital, he was given two IV antibiotics to treat the infection, had multiple dressing changes, had lab work conducted, and received pain management requiring medication oversight. Robert's case was discussed in rounds and his care team expressed concern about the bleeding from his amputation that had been going on for several days post-surgery. By Sunday afternoon, the case manager responsible for*

his transfer to skilled nursing was assured that Robert was ready for transfer per a consult with orthopedics. The SNF nursing supervisor was alerted to the incoming resident and the hospital care team began working on the paperwork for discharge.

Robert's discharge paperwork was sent over to SNF admissions. Unfortunately, the admissions coordinator had left for the day and he did not realize this paperwork was coming in Sunday evening. There were some back-and-forth discussions between the hospital case manager and the SNF nurse supervisor regarding Robert's planned discharge. The discharge was cancelled, and then re-activated when the SNF admissions coordinator drove back to the facility to get paperwork. The hospital case manager was not comfortable with this abrupt change in plans and the late time of day for discharge. However, given the admissions coordinator had just driven back to the facility from home to get the paperwork, she felt compelled to allow the discharge.

Robert also reported being happy either to stay in the hospital or be transferred to the SNF, as long as it did not interrupt his watching of the Super Bowl. No one noticed that Robert had not yet received his 4PM antibiotic dose prior to his discharge. Amidst all of the confusion, Robert was discharged without his antibiotics and with blood on his dressing.

Robert arrived at the SNF at 4:30PM. He had missed his 4PM dose of antibiotics and the SNF nurse did not have access to his medications. Ideally, the SNF would like to have known about the planned admission and had the antibiotics ready upon the patient's arrival. However, in some cases, hospital discharges are postponed indefinitely because of a change in patient clinical status, leaving the facility with unused medications. The facility has abandoned this practice because of its financial implications. In addition to the missed dose of antibiotics, Robert was also sent to the facility without a narcotic script for pain management. To complicate matters, Robert's foot dressing was soaked in blood, and the notes received said the dressing had been "changed overnight and was intact." There was also a physician note reporting "some bleeding from the wound." The amount of blood present, along with the confusing messages included in the note, concerned the SNF nurse and she was not sure how to proceed.

The SNF did not have a physician or nurse practitioner on duty at the time of Robert's admission, as is standard for this facility on Sundays. To address the concerns regarding bleeding, the nurse contacted the hospital to clarify with staff what the wound looked like

before Robert left to determine whether the status was new or the same. To reconcile the medication discrepancies, the SNF nurse contacted the facility's on-call physician. This physician did not know Robert but ordered the narcotic to treat his pain. The medications came from an external pharmacy and so there was a delay in getting these to the facility. Robert was sent to his surgeon the next day to check on the wound.

Lessons learned from Robert's patient story:

- In Robert's transition from the hospital to a skilled nursing facility, he experienced several "near misses," any one of which could have resulted in his readmission to the hospital. These near misses represent a few unreliable processes all failing at the same time, often referred to by quality experts as the "Swiss Cheese" effect.

- The hospital staff were having a busy weekend and felt obligated and rushed to discharge Robert.

- There was poor communication of information about Robert's condition status and a lack of coordination amongst the care team as they transferred Robert from one setting to the next.

- The providers at both the hospital and the skilled nursing facility were not able to plan well for Robert's care because of gaps in service present on weekends and during changes in shift.

- In the end, there was a lack of clarity about the resident's care needs and the facility's ability to meet those needs at the time of this transition.

- As a result, no one felt empowered to "stop the line" in Robert's transition.

Step 3b. Review your organization's resident experience data to identify opportunities for improvement.

Evaluate trends in your organization's resident experience data, with a focus on the informal feedback and any survey data obtained over the last year. If your organization does not survey residents for this information, work with your Executive Sponsor to develop and institute a resident experience survey tool to obtain this feedback and trend the patient response data in a time series chart for the facility, by month, for the last 12 months.

Of particular interest is data that provides information about the resident's experience with their transition to and from skilled nursing. The Care Transitions Program, a program focused on providing health care services for improving quality and safety during care handoffs, offers the Care Transitions Measure (CTM) for obtaining information about the patient's experience with the transition from hospital to home or post-acute care. Two versions of the CTM are available at www.caretransitions.org/getdocctm.asp and may serve as an example for developing or adding to your resident survey tools.

Step 3c. Review 30-day all-cause readmission rates to identify opportunities for improvement.

Collect historical data and display monthly 30-day all-cause readmission rates or acute care transfer rates (Figure 10) for the SNF over time; include at least 12 months of data, preferably more. In addition to tracking the 30-day all-cause readmission rate, SNFs may choose to also look at various segments of the population (e.g., residents readmitted to the hospital within the first five days, residents readmitted due to infection, residents with emergency vs. planned readmission to the hospital).

Figure 10: Outcome and Balancing Measures: 30-Day All-Cause Readmissions, Hospitalization Rates, Emergency Department Visits Only, and Transfers Resulting in Observation Stays

Measure Name	Description	Numerator	Denominator
30-Day All-Cause Readmissions to the Hospital from SNF	Percent of all SNF residents admitted to the SNF from the hospital who are then readmitted to the hospital within 30 days	Number of residents admitted to the SNF from the hospital who are then readmitted to the hospital within 30 days Exclusion: Planned readmissions	Total number of residents admitted to the SNF from the hospital in the measurement month
Hospitalization Rates	Number of SNF residents admitted to the hospital, divided by the number of resident days and multiplied by 1,000	Number of SNF residents admitted to the hospital	Resident days

Emergency Room Visits Only	Number of all-cause ED visits that do not result in a hospital admission or an observation stay, divided by the number of resident days and multiplied by 1,000	Number of SNF residents transferred to the ED only (does not result in admission or observation stay)	Resident days
Transfers Resulting in Observation Stay	Number of acute care transfers that result in an observation stay, divided by the number of resident days and multiplied by 1,000	Number of SNF resident transfers resulting in an observation stay	Resident days

Step 3d. Develop mutually agreed upon standardized transfer criteria with cross-continuum partners.

Clinicians in both hospitals and SNFs frequently work in isolation, unaware of the information required by providers in each setting to coordinate a successful transfer. Employing a cross-continuum team to co-design and test transfer criteria to guide the transfer process provides a means to optimize care across settings. Through the team (or through cross-continuum partnerships if a team does not yet exist), commit to regular meetings and a means to efficiently address barriers. Follow these steps to develop a standardized transfer process and standardized transfer criteria:

- If possible, shadow one another in each care setting to observe the transfer process in real time.

- Together, draft a process map of an ideal transfer from the perspective of each care setting. For more information on process mapping, see the IHI website at www.ihi.org/knowledge/Pages/Tools/Flowchart.aspx.

- Make the expectations of each care site explicit rather than assumed. The key is to ban assumptions — if needs and requests are not specified, process failures will likely occur.

- Develop "standardized transfer criteria" with your colleagues in the other setting to help guide the transfer process; ensure that each is able to provide the information requested. For example, the staff of one SNF initially identified that they wanted to know whether the resident they were receiving was stable when he or she left the hospital. When pressed to specify the meaning of "stable," the director of nursing was able to

easily generate a list: no unassessed or untreated fever, no signs of recent deterioration, oxygenation levels unchanged or improving in the previous 24 hours, etc.

- Test the criteria with the next transfer, and review what worked and what did not. Implement a disciplined means of debriefing — such as an in-person or virtual (by phone) huddle immediately following the transfer — to capture learning in real time. For example, a debrief may address a major frustration frequently reported by SNFs: who to call to problem-solve when a transfer goes poorly? Waiting until the next meeting sacrifices the immediate rich learning that can take place.

In developing the transfer criteria and process, keep in mind that the transfer may need to be timed to the availability of certain special skills within the SNF. For example, the transfer may need to occur on a day/time when the physician will be in attendance or when the wound care nurse is in the building.

Figures 11 and 12 are examples of Universal Transfer Forms developed to assist with the transfer of patients from the hospital to post-acute settings. Figure 11 depicts a Universal Transfer Form developed by Akron Regional Hospital Association in partnership with 26 skilled nursing facilities within the Akron, Ohio, community. Figure 12 is a Universal Transfer Form developed by the Massachusetts Department of Public Health with input from providers across the state.

Figure 11: Akron Regional Hospital Association: Universal Transfer Form (How-to Guide Resources, page 81)

Figure 12: INTERACT Quality Improvement Program Nursing Home to Hospital Transfer Form

(How-to Guide Resources, page 85)

Step 4. Use the Model for Improvement

Developed by Associates in Process Improvement, the Model for Improvement (Figure 13) is a simple yet powerful tool for accelerating improvement that has been used successfully by hundreds of health care organizations.

The model has two parts:

- Three fundamental questions that guide improvement teams to 1) set clear aims, 2) establish measures that show if changes lead to improvement, and 3) identify changes that are likely to lead to improvement.

- The Plan-Do-Study-Act (PDSA) cycle to conduct small-scale tests of change in real work settings — by planning a test, trying it, observing the results, and acting on what is learned. This is the scientific method, used for action-oriented process improvement

Figure 13: The Model for Improvement

Learn more about the Model for Improvement at www.ihi.org.

Question 1: What are we trying to accomplish?

Craft an aim statement to guide the work. Aim statements communicate what a team hopes to accomplish and the magnitude of its change. Aim statements have four parts to them: what the team expects to do; by when; for whom, and it states the measureable goals.

Sample aim statements:

1) *By December 2011, Maryfree Skilled Nursing Facility will reduce readmissions for all residents as measured by a decrease in 30-day all-cause readmission rate from 17 percent to 13 percent or less. The facility will focus on identifying early changes in patients' condition, standardized communication, and teamwork.*

2) *General Nursing Home will improve transitions for patients discharged from the hospital and admitted to the nursing home as measured by a reduction in unplanned 30-day readmissions of patients from 25 percent to 15 percent or less by December 31, 2011. We will focus on coordination with the hospital, determining resident care goals, and assessment of changes in the patients' condition.*

For more on setting aims, please refer to:
www.ihi.org/knowledge/Pages/HowtoImprove/ScienceofImprovementSettingAims.aspx.

How to Select Pilot Units or a Pilot Population

Based on what is learned about 30-day all-cause readmission data, select one or two skilled nursing units where readmissions occur the most. If one resident population accounts for a large percent of the readmissions (e.g. residents with infections) it may help to focus initially on this patient segment.

How to Form an Improvement Team

Front-line improvement team(s) vary from organization to organization. Ideally, involve individuals who actively assess residents, teach and facilitate resident education, communicate essential information during handovers to/from the other care settings, and arrange post-SNF care follow-up. Front-line improvement team(s) will initially test the three Key Changes on the unit(s). A typical front-line improvement team includes:

- A Day-to-Day Leader for each pilot unit who will drive the work on their respective unit(s);

- Residents, family members, or resident caregivers;

- Physician or nurse champion;

- Nurse practitioner or physician assistant (if applicable);

- Nurse manager/supervisor, staff nurses, case manager, certified nursing assistant, nurse educators;

- Dietician;

- Physical therapist/occupational therapist;

- Social workers and/or discharge planners; and

- Clinicians and staff from other care settings and/or community-based organizations (e.g., acute care, home health care, area agency on aging, other SNFs).

Question 2: How will we know that a change is an improvement?

Data to reduce readmissions and rehospitalizations is best for learning not judgment. Outcome, process, and balancing measures inform improvement. Outcome measures directly relate to the aim — in this case, to reduce readmissions or rehospitalizations. Process

measures reflect how work gets done around the key changes. Balancing measures help ensure that we are not causing detriment to an important part of the system. When data is displayed in a time series graph or in a run chart trends and improvement are easy to observe (see Figure 14).

See the System of Measures section on page 52 for a comprehensive list of all measures.

Figure 14: Example Run Chart: Outcome Measures for Readmissions and ED Only Visits
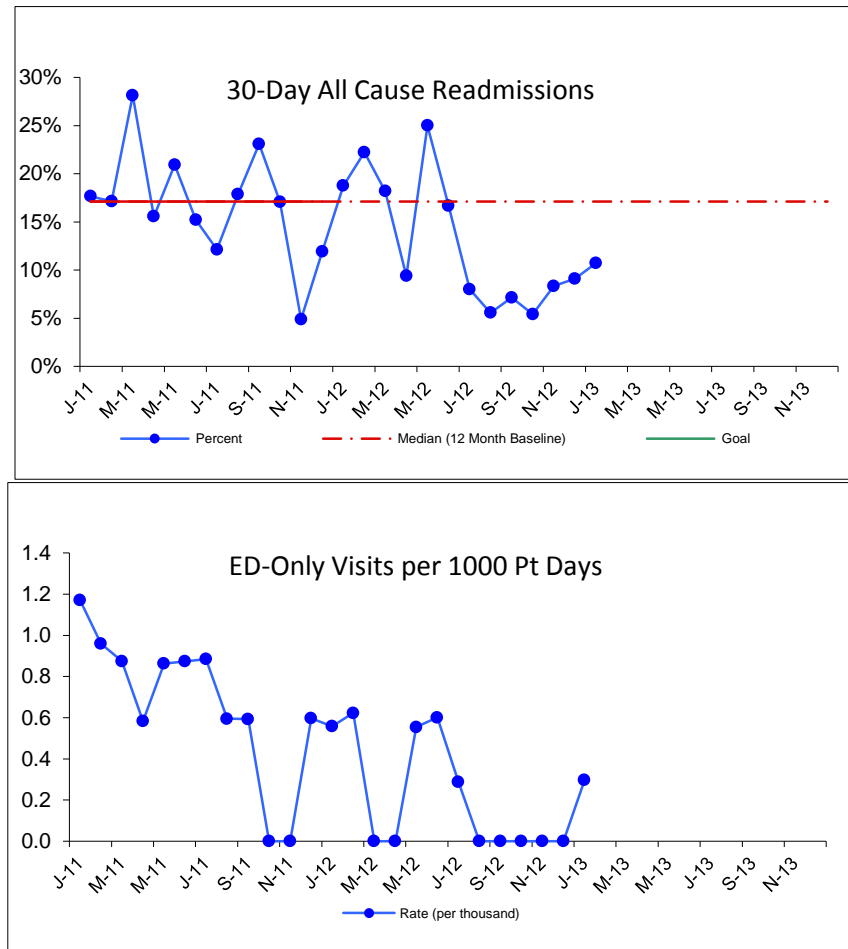
Question 3: What changes can we make that will result in improvement?

Select the changes needed to bring about improvement from among the Key Changes outlined in section II.

The key changes in this guide represent the temporal journey of a resident's transition from the hospital to skilled nursing. First, the SNF assesses (either by phone or in person) the resident's

condition while they are in the hospital to determine overall fit and to ensure the capability and readiness of staff to care for the resident. The second key change, occurring once the resident is admitted, involves re-assessing the resident and reconciling their treatment plan and medication list so that SNF staff are set up to provide ideal care. The third key change is engaging the resident and their family caregivers in creating an overall plan of care. This change often occurs within the first few days of the resident's stay in the SNF. All changes should be reliably implemented and scaled up across the SNF to ensure a safe and effective transition from the hospital to skilled nursing.

Figure 15: Flow Chart of Key Changes to Create an Ideal Transition from the Hospital to the SNF

| Key Change 1: **Ensure That SNF Staff Are Ready and Capable to Care for the Resident** | → | Key Change 2: **Reconcile the Treatment Plan and Proactively Plan for Condition Changes** | → | Key Change 3: **Engage the Resident and Their Family Caregivers in a Partnership to Create an Overall Plan of Care** |
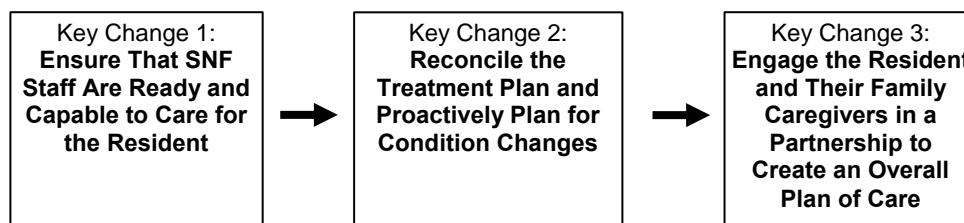
Using Plan-Do-Study-Act Cycles for Learning and Improvement

The Plan-Do-Study-Act (PDSA) cycle drives improvement; it is a pragmatic version of the scientific method, used for action-oriented process improvement. A team conducts small-scale tests of change in real work settings — by planning a test, trying it, and observing the results because observation yields significant learning as a team tests and then implements changes.[27-30] The key changes described in section II include suggestions for observation; action is then taken based on what is learned from the test. Based on the results, a test of a specific change may be expanded, adapted to be more useful, or sometimes abandoned altogether.

Why Test Changes?

- To increase your belief that the change will result in improvement;

- To decide which of several proposed changes will lead to the desired improvement;

- To evaluate how much improvement can be expected from the change;

- To decide whether the proposed change will work in the actual environment of interest;

- To decide which combinations of changes will have the desired effects on the important measures of quality;

- To evaluate costs, social impact, and side effects from a proposed change; and

- To minimize resistance upon implementation.

How to Test a Change

A first test of change usually happens on a small scale (e.g., conducting a "warm handover" communication between the hospital and SNF with one incoming resident, or for one day). Use a Plan-Do-Study-Act format and predict what will happen as a result of trying something different. Observe the results, learn from them, and continue to the next test. Use iterative PDSA cycles to test under a variety of conditions. This improves the team's belief that the change will work reliably when implemented. See the PDSA Worksheet (Figures 16 and 17).

Figure 16: PDSA Worksheet (How-to Guide Resources, page 86)

Figure 17: Example Completed PDSA Worksheet (How-to Guide Resources, page 87)

Most changes require a series of successive tests before implementation. Testing should include a variety of conditions, for example, including more staff to test the change; testing the change with a variety of types of residents and family caregivers; testing the change on weekdays and weekends, when short staffed and well-staffed, on days with many admissions and few admissions, etc. The point is to learn as much as possible to increase the likelihood that the change is an improvement prior to implementation and to create a process that is

reliable. An iterative series of PDSA cycles involving warm handover communication is outlined below.

Example of a Series of PDSA Cycles

During a cross-continuum team meeting, staff from the orthopedics unit at the hospital and the staff from the sub-acute unit at the local SNF agree to test a verbal warm handover report using a standard communication template they had developed together.

Aim: Design and test a warm handover report between the hospital orthopedics unit and local SNF using a standard communication template with the nurse at the hospital to clarify information about patients transferred to skilled nursing. Starting with the next patient discharged, staff will test the report process over the next two weeks.

- Cycle 1: One SNF nurse calls the staff nurse on the hospital orthopedics unit on the day prior to one patient's discharge and utilizes a communication template to guide discussion. She finds that many of the questions on the communication template are redundant and the conversation takes more than 10 minutes to complete. Both nurses agree that 4 questions can be eliminated.

- Cycle 2: The SNF nurse uses the revised communication template to communicate with the staff nurse from the hospital orthopedics unit on the next planned discharge from the hospital to the SNF. After this test, they agree to add a question to the template to assess the patient and family caregiver's ability to Teach Back their understanding of the care plan.

- Cycle 3: The SNF nurse uses the revised communication template to communicate with the hospital staff nurse for the next three transfers. The call takes 5 minutes and the SNF nurse finds the new information useful and continues the patient teaching provided in the hospital.

- Cycle 4: The SNF nurse uses the communication template for a warm handover report on all transfers from the orthopedics unit over a one week period.

- Cycle 5: The SNF nurse trains three other nurses on the SNF sub-acute unit on the warm handover process and the communication template is used on all transfers from the orthopedic unit to the sub-acute unit.

- Cycle 6: The SNF nurse gathers feedback from the other nurses who have used the standard communication template and brings it to the next cross-continuum team meeting with the hospital.

- Cycle 7: The warm handover process and standard communication template are tested with additional hospital units.

Suggestions for Conducting PDSA Cycles

- Keep tests small; be specific.

- Make a prediction about what will happen if the tests succeeds.

- Each test provides new insight to inform the next.

- Expand test conditions to determine whether a change will work under a variety of conditions:
    - Different times of day (e.g., day and night shifts, weekends, holidays) when the unit is adequately staffed;
    - At times of staffing challenges; or
    - Different types of patients (those with lower health literacy, non-English speaking patients, short stay or long stay patients).

- Collect sufficient data to evaluate whether a test has promise, was successful, or needs adjustment. Compare data to findings to learn more and design future tests.

Test to Increase Process Reliability

Reliability is failure free operation over time so that processes produce desired results every time, for every appropriate patient. As PDSA cycles ramp up and the change is ready for implementation, make sure to precisely specify the work, who does what, when, how, where, etc. To make processes more reliable, take into account human factors principles: build on existing habits, use checklists to avoid relying on memory, foolproof the process so that it is impossible to do the wrong thing, use standard protocols and training.

To increase reliability, for example, use a checklist to ensure all pre-determined and standardized transfer criteria are met. If the responses vary, this may reveal a lack of reliability in how the work is done. Another method to determine process reliability is to interview staff about how they do particular work, like patient teaching and the use of Teach Back. If the

responses vary, this may reveal a lack of reliability in how the work is done. Use peer observers and coaches to help build new competencies among the staff and develop needed reliability.

Make sure there is a process in place that identifies process failures (e.g., a patient is ready for discharge from the hospital, but the SNF admission nurse has not yet received information to determine appropriateness for admission to the facility). Learn where failures occur and then use problem-solving to design solutions, redundancies, or remedies if they occur. This is especially useful when residents have been readmitted.

The following is an example of how to plan for testing based upon the recommended Key Change 3: "Engage the Resident and Their Family Caregiver in a Partnership to Create and Overall Plan of Care."

Example: When redesigning your process for determining resident's goals of care, including end-of-life preferences, work with staff who conduct the tests to precisely describe the work, including information regarding the following:

- *Who will do it? (be specific — e.g., include the name of the nurse assigned to the resident)*

- *What will they do? (e.g., use the INTERACT Communication Guide as a resource to improve discussions with residents and their family caregivers about their care goals)*

- *When will they do it? (e.g., during the care conference with newly admitted residents)*

- *Where will they do it? (e.g., in family meeting room or the resident's room)*

- *How will they do it? (e.g., outline an agenda and framework for discussion based on the INTERACT Communication Guide)*

- *How often will they do it? (e.g., with every resident during their care conference that occurs within 48 hours of admission)*

- *Why should they do it? (e.g., to improve understanding of resident care goals, improve SNF staff relationship with resident and family caregivers, ensure care is aligned with resident's preferences and goals)*

Continue to test the process under a variety of conditions (e.g., different nurses, different kinds of residents). Adapt the change iteratively until it optimally meets the needs of both residents

and staff and a high level of reliability is achieved (i.e., the process works as designed at least 95 percent of the time).

Learn from failure as well as from success. Understanding common failures (situations when a process is not executed as expected) helps the team to (re)design the new processes to eliminate those failures.

> _Learning from a failed test_:
>
> _The process being tested required nurses to reconcile the medication lists received from the hospital, primary care physicians, as well as information about medications provided by the resident. During the initial testing of this process, the admitting nurse did not know how to obtain an accurate list of medications from the resident. The improvement team at the SNF met and decided that for the next three admissions, they would request that the resident's family bring in all of the medications that the resident was taking prior to the hospital admission as well as the medication schedule (if available) that they followed at home._

After successful testing under varying conditions with desired results, document the process so there is no ambiguity and all involved can articulate the exact same steps in the process.

Use Data, Displayed Over Time, to Understand Progress

Use data to understand if the changes you are making result in improvement. For example, display in a time series graph the percentage of residents with an advanced care plan documented. Annotate graphs to note when specific changes are tested and implemented. Continue to collect and display this data to see whether your changes result in improvement. Augment quantitative data with information gathered from asking residents about their care experience.

Track whether new and improved processes are executed as expected with process measures. Learn whether and how specific changes work as planned. Figure 18 shows an example of an annotated time series graph for a process measure for Percent of Residents with a Documented Advanced Care Plan. The annotations show when specific changes were tested or implemented.

Figure 18: Example Time Series Graph for Process Measure
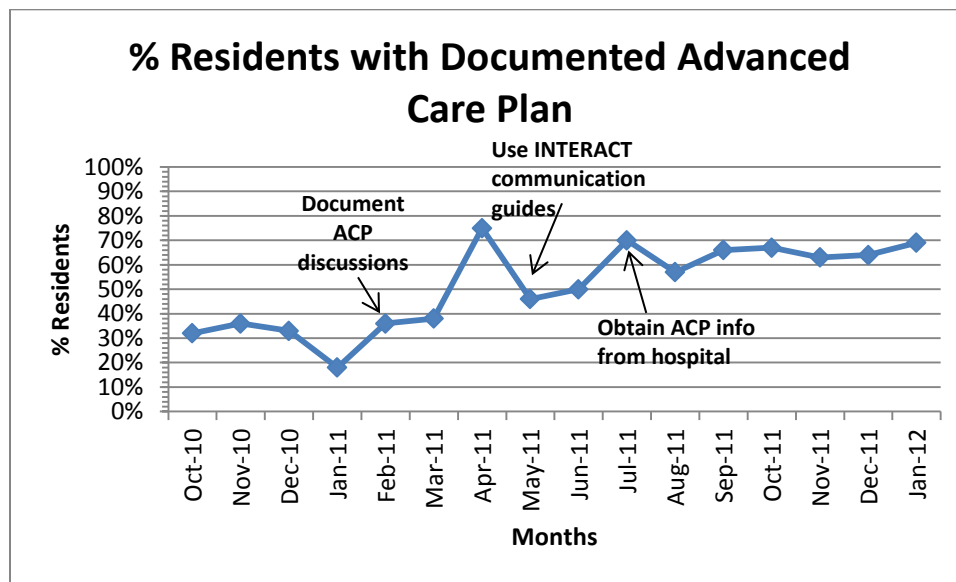
When data suggest a lack of process reliability — ask the people who do the job what barriers they face. Identify opportunities to execute the new processes more reliably. Avoid blaming staff who do the work. Assume the problem is from poor process design. Work with the team to fix it. For example, if the team observes that nurses are not providing care consistent with the resident's care goals, the team should ask nurses about barriers that prevent them from doing so. By eliminating these barriers, the team will improve the likelihood that resident care goals will be met.

Note, for example, how the data in the graph above (Figure 18) enables the team to see when performance declined and test new interventions to improve reliability. Share data with unit staff, physicians, and senior leaders. Reflect on lessons learned from both successful and unsuccessful tests of change.

Step 5. Implementation, Scale-up, and Spread

Implementation of Changes

After testing a change on a small scale, learning from each test, and expanding tests to cover a wide range of conditions, the team is then ready to implement the change. Implementation occurs when the staff are ready for the change, when the degree of certainty that the change is an improvement is high, and when the cost of implementation is low or the change can be easily removed or redone. Making the change permanent and a routine part of care usually requires revisions to written policies, hiring, training, compensation, electronic work aides in the EMR,

equipment, and other aspects of the organization's infrastructure that were typically not engaged during the testing phase. Pay attention to communication (i.e., publicizing the benefits of the change), documenting improvement, as well as keeping in contact with the pilot team to support the team during implementation.

> Implementation Example: During the testing process, a few nurses may be trained in the redesigned handover processes like using a phone call with the discharging hospital nurse to confirm understanding of the resident's care needs. Once the processes and support materials have been adapted so that this handover involving SNF and hospital nurses occurs effectively over 90 percent of the time, the process should be implemented across the facility. Making this process the default system (i.e., the way the work is done rather than the way a few nurses do the work from time to time) requires a training system for all nurses, and changes to orientation programs for new nurses. It might also require changes to an IT system where information about the resident is documented and shared. Communication to all staff about the revised expectations for teaching and learning might be developed to start to generate interest in implementing the redesigned process in other parts of the SNF or in other facilities (e.g., in other units or other facilities within the system or community) or with other disciplines (e.g., physicians or pharmacists) in preparation for spread.

During implementation, attend to social aspects of the change as well as the technical infrastructure. Leaders need to communicate not only the *what*, and the *why*, but also the *how* of the change, and address questions and concerns. It is common for processes to work reliably during testing and less reliably, temporarily, during implementation because a larger group, some unfamiliar and/or unsympathetic with the purpose, must implement a change.[33] There may be resistance, or simply confusion. It may take some cycles of testing to put in place an effective infrastructure to support the change(s). After implementation, continue to monitor whether processes are reliable and act on that information to adapt the processes and the related infrastructure to support the change. Make it easy to do the right thing, and hard to do the wrong thing.

> **Tips for Sustaining Improvements**
> - Communicate aims and successful changes that achieved the desired results (e.g., newsletters, storyboards, patient stories, etc.).
> - "Hardwire" processes so that the new processes are difficult to reverse (e.g., IT template, yearly competencies, role descriptions, policies and procedures).
> - Assign ownership for oversight and ongoing quality control to "hold the gains."
> - Assign responsibility for ongoing measurement of processes and outcomes.

Scale-up of Changes

Scale-up involves overcoming system and infrastructure issues that arise during implementation. For example, after pilot testing a new process for determining resident care goals, a SNF unit identified this as a successful improvement. The SNF leadership then undertakes a deliberate implementation of this change in the whole facility. The infrastructure required to scale up and sustain this process on a unit may be different from the infrastructure required for implementation throughout the facility (i.e., documentation in the electronic medical record or annual competency training). If there are barriers to scaling up the change across units, they should be noted and removed..

Important leadership considerations include ensuring staff have adequate time and resources to adopt the changes, and helping staff overcome barriers that inhibit scale up. Are the changes developed at the pilot level scalable to the entire organization? For example, having conversations with residents about their advance care plan may mean that nurses and other staff develop communication competencies and free up time to reliably implement this new competency.

Spreading Changes

Leaders should plan for spreading the improvement developed in the pilot population or unit during the early stages of the initiative. After successful implementation of the key changes (described in section II) in the pilot unit or with a pilot population, leaders need to develop a spread plan. Even though the changes have been tested and implemented, spread efforts

benefit from testing and adaptation (using PDSA cycles) in new resident populations, units, or organizations.

Successful spread of reliable processes requires leaders to commit sufficient resources to support spread. Pilot unit staff also play an important role in spread activities by 1) making the case that the changes contribute to better patient transitions and reduced readmissions, and 2) generating information and materials that leaders can package to ease spread. They may teach and mentor others.

A key responsibility of leaders is to develop a plan and timetable for spread and then to measure and monitor progress. Figure 19 shows an example of a tool to monitor spread of changes. This tool allows a leader to visualize spread progress of each change and the spread of changes across the locations.

Figure 19: Spread Tracker Template (How-to Guide Resources, page 89)

Leaders would want to determine if further guidance and support might accelerate progress and results. It is recommended that outcome measures be reported and tracked at the hospital or system level as well as at the unit level in order to provide leaders, unit managers, and front-line staff with regular feedback on their progress.

Recommended Readings and Resources on Quality Improvement

Books and articles:

Berkowitz RE, Schreiber R, Paasche-Orlow MK. Team improvement and patient safety conferences: Culture change and slowing the revolving door between skilled nursing and the hospital. *Journal of Nursing Care Quality.* 2012 Feb 22. [Epub ahead of print]

Berkowitz RE, Jones RN, Rieder R, et al. Improving disposition outcomes for patients in a geriatric skilled nursing facility. *Journal of the American Geriatrics Society.* 2011;49(6):1130-1136.

Gozalo P, Teno JM, Mitchell SL, et al. End-of-life transitions among nursing home residents with cognitive issues. *New Engl J Med.* 2011;365:1212-1221.

Kenagy J. *Designed to Adapt: Leading Healthcare in Challenging Times.* Bozeman, MT: Second River Healthcare Press; 2009.

Langley GJ, Moen R, Nolan KM, Nolan TW, Norman CL. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance.* San Francisco: Jossey-Bass; 2009.

Massoud MR, Nielsen GA, Nolan K, Schall MW, Sevin C. *A Framework for Spread: From Local Improvements to System-Wide Change.* IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement; 2006. (Available on www.IHI.org)

Nolan KM, Schall MW (editors). *Spreading Improvement Across Your Health Care Organization.* Oakbrook Terrace, IL: Joint Commission Resources and the Institute for Healthcare Improvement; 2007:1-24.

McCarthy D, Beck C. *Summa Health System's Care Coordination Network.* The Commonwealth Fund; 2007.

Mor V, Intrator O, Feng Z, Grabowski DC. The revolving door of rehospitalization from skilled nursing facilities. *Health Aff (Millwood).* 2010;29:57-64.

Ouslander JG, Berenson RA. Reducing unnecessary hospitalizations of nursing home residents. *New Engl J Med.* 2011;365:1165-1167.

Ouslander JG, Lamb G, Tappen R, et al. Interventions to reduce hospitalizations from nursing homes: Evaluation of the INTERACT II collaborative quality improvement project. *Journal of the American Geriatrics Society.* 2011;59:745-753.

Womack JP, Jones DT. *Lean Thinking*. Simon & Schuster Audio; 1996.

Web tools and resources:

On Demand Presentation: An Introduction to the Model for Improvement. Institute for Healthcare Improvement. Available at: www.ihi.org/offerings/VirtualPrograms/OnDemand/ImprovementModelIntro/Pages/default. aspx.

Quality Improvement 101-106. *IHI Open School for Health Professions.* Available at www.ihi.org/offerings/IHIOpenSchool/Courses/Pages/default.aspx.The Institute for Healthcare Improvement offers online courses, through the IHI Open School for Health Professions, that are available free to medical students and residents and for a subscription fee for health care professional

V. System of Measures

Outcome Measures: Readmissions				
Measure	**Description**	**Numerator**	**Denominator**	**Data Collection Strategy**
30-Day All-Cause Readmissions to the Hospital from SNF	Percent of all SNF residents admitted to the SNF from the hospital who are then readmitted to the hospital within 30 days	Number of residents admitted to the SNF from the hospital who are then readmitted to the hospital within 30 days (regardless of unit to which the resident is admitted) Exclusion: Planned readmissions (e.g., chemotherapy schedule, planned surgery)	Total number of residents admitted to the SNF from the hospital in the measurement month	*Could stratify by sending hospital*
Hospitalization Rates	Number of SNF residents admitted to the hospital, divided by the number of resident days and multiplied by 1,000	Number of SNF residents admitted to the hospital	Resident days	
Balancing Measures				
Measure	**Description**	**Numerator**	**Denominator**	**Data Collection Strategy**
Emergency Department (ED) Only Visits	Number of all-cause ED visits that do not result in a hospital admission or an observation stay, divided by the number of resident days and multiplied by 1,000	Number of SNF residents transferred to the ED only (does not result in admission or observation stay)	Resident days	
Transfers Resulting in Observation Stay	Number of acute care transfers that result in an observation stay, divided by the number of resident days and multiplied by 1,000	Number of SNF residents transferred to acute care resulting in an observation stay	Resident days	

VI. Case Study

Pierce County, Washington

Pierce County, Washington, located just south of Seattle, is the second most populous county in Washington State. The county is made up of urban areas in and around the city of Tacoma as well as less-populated towns. Pierce County also has the highest county-wide readmission rate within the state for patients discharged to skilled nursing facilities (SNFs). In 2011, the average Washington State readmission rate for Medicare fee-for-service patients discharged to SNFs was 19.0 percent. In Pierce County, this rate was 20.6 percent.

In early 2011, MultiCare Health System, a participant in the STAAR initiative, created an interdisciplinary team focused on improving care transitions and reducing readmissions from SNFs. The team, originally involving three area SNFs, evolved to over ten participating SNFs by the end of the year. Health care systems in Pierce County have a long history of working together to improve the health of county residents. As such, in January 2012, MultiCare Health System, one of the four hospital systems in the county, invited key stakeholders from Pierce County and several neighboring counties to propose a partnership for improving care transitions and reducing readmissions for their shared patients. What developed out of these early discussions was a series of active work teams focusing on populations at risk for readmissions.

The Pierce County STAAR & Beyond Team quickly gained traction with its efforts focused on SNF patients. The team comprises two groups — a Case Management/SNF Working Group and a Provider Working Group. The Case Management/SNF Working Group includes administrators and directors of nursing from SNFs across the county (12 organizations and 32 individual facilities), as well as care managers from the four area health systems. This group is convened monthly and facilitated by the Medical Director of Care Management at MultiCare Health System. The Provider Working Group, also facilitated by the Medical Director of Care Management, includes physicians from the four health systems, primary care physicians, area SNFs, and hospital emergency departments.

During the STAAR & Beyond Team meetings, participants share data, identify opportunities for improvement, identify and agree upon best practice standards, and report out on PDSA cycles (tests of change) underway. These meetings serve as a forum for collaboration and shared learning focused on accelerating the progress of all.

Key Changes Implemented

1. **Ensure SNF Staff Are Ready and Capable to Care for the Resident**

   - One challenge identified through cross-setting discussions was the understanding that hospital staff have of the capabilities of SNFs and long-term care facilities (LTCs) within the county. Using the INTERACT Facility Capabilities List as a template, the Pierce County Case Management/SNF Working Group developed an electronic document listing the facility capabilities of all SNFs and LTCs in the county. The document, which includes key contacts and phone numbers for each facility, is updated quarterly and distributed to all key hospital staff, including care managers and emergency department staff.

   - SNFs in Pierce County have collaborated with MultiCare Health System to successfully put in place a physician-to-physician warm handover call for all patients discharged to SNFs. The impetus for this call grew out of discussions taking place in the Provider Working Group meetings, with strong buy-in from both MultiCare and SNF physicians. Participants in the Provider Working Group also pushed for and implemented a reciprocal SNF-to-hospital warm handover for residents with condition changes who are transferred to acute care. The Provider Working Group has used their influence to create buy-in for the spread of this warm handover process to other area hospitals.

   - A similar warm handover process is now being tested with nursing to ensure important information about the patient's status and care needs is communicated prior to discharge. Driven by SNFs, a Cross-continuum Working Group has co-designed a warm handover script to guide discussions with hospital nurses.

2. **Reconcile the Treatment Plan and Proactively Plan for Condition Changes**

   - Hospitals within Pierce County are now providing a discharge summary, co-designed with input from SNFs, within four hours of the resident's discharge from the hospital. Upon the request of SNFs, the discharge summary is now available via the electronic medical record (EMR). SNF nurses may download the discharge summary information that they as a collective group designed.

   - SNFs within Pierce County use the INTERACT SBAR Tool to more effectively communicate resident condition changes with physicians. SNFs are now also using the

SBAR Tool in warm handover communication with the emergency department when residents are transferred to acute care.

- All SNFs within Pierce County are committed to using the INTERACT Acute Care Transfer Form to provide important information to hospital and emergency department staff when residents are transferred to acute care. The Case Management/SNF Working Group is identifying methods for ensuring this process occurs reliably for all transferred residents and that the information is effectively utilized once the patient is received by the hospital or emergency department. In cases during which SNF nurse is unable to complete the INTERACT Acute Care Transfer Form prior to the resident arriving at the emergency department, the INTERACT SBAR Form is sent with the resident. The INTERACT Acute Care Transfer Form is faxed to the emergency department as soon as it is completed.

- Several SNFs are utilizing the INTERACT Stop and Watch Tool house-wide to improve monitoring for condition changes. Staff utilizing the tool include maintenance, dietary, housekeeping, Certified Nursing Assistants, and all others who come in contact with residents throughout their stay.

- One Pierce County SNF is using The Care Transitions Program Medication Discrepancy Tool (MDT) to identify trends in medication discrepancies and to focus their improvement efforts. This SNF is reporting out on their experience at the monthly meetings so that others will learn alongside this SNF's efforts.

3. **Engage the Resident and Their Family Caregivers in a Partnership to Create an Overall Plan of Care**

- Deeply learning about resident and family caregiver understanding of the resident's clinical condition and self-care needs is a key best practice associated with reducing readmissions to the hospital. While the use of Teach Back has not gained traction within some area hospitals, Pierce County SNFs are eager to utilize this method for improving resident and family understanding and engagement. Several participating SNFs are testing the Teach Back method by using it as an approach for enhancing advanced illness discussions with residents.

- Pierce County SNFs are also working to improve the care conferences that occur with residents and their family caregivers upon admission to the facility. SNFs are conducting tests to improve the timing and reliability of care conferences and ensure important topics, such as advance care directives and palliative care needs, are discussed and clarified.

Other Areas of Work

There are a number of other important areas of work underway through the Pierce County STAAR & Beyond Team. SNFs and hospitals are working together to develop processes that support implementation of the INTERACT Quality Improvement Program tools. For example, SNFs are using the INTERACT Quality Improvement Tool for Review of Acute Care Transfers to learn from each resident transfer to the hospital.

Many SNFs in Pierce County are now working to ensure recently discharged residents are not readmitted to the hospital. SNFs are scheduling follow-up primary care appointments and conducting follow-up phone calls for discharged residents. A small work group has also been convened to increase awareness on the part of primary care physicians, home health nurses, and residents and families of the Centers for Medicare & Medicaid Services rule that allows residents to be admitted directly into skilled nursing if within 30 days of their original SNF admission.

Barriers Encountered

- Ensuring Complete and Reliable Implementation: Successfully implementing and sustaining improvement requires ongoing monitoring of process changes. Given the number of organizations working together and the collaborative nature of the work, there is not currently a formal structure for providing oversight and management of the Pierce County STAAR & Beyond Team's efforts. Working Group members are qualitatively sharing their progress and experiences within the group, however, there is not an established way to quantitatively assess and understand the reliability of process changes taking place.

- Time for Project Management: The efforts of the Pierce County STAAR & Beyond Team require significant project management support to keep the work moving ahead. MultiCare Health System has dedicated a Medical Director for Case Management and Administrative Assistant to facilitate this work. At times, this level of support has not

been adequate and changes in personnel may create gaps in leadership and support going forward.

- Lack of a County-wide EMR: Communication and information sharing across organizations would be greatly enhanced with a county-wide EMR in place. There are current plans for an EMR to be implemented in the summer of 2013.

Breakthroughs and Key Lessons Learned

- Sustainable Physician Engagement: The efforts of the Pierce County STAAR & Beyond Team were greatly enabled by the ongoing involvement of a physician to champion the work. In the initiative's formative stages, the MultiCare Medical Director of Case Management was able to convene and obtain buy-in from hospital leadership, physician peers, and county area SNFs.

- Collaboration Between SNFs Despite Business Motives: As the national health care landscape evolves, SNFs across the country are increasingly in need of ensuring their viability within a highly competitive market. Despite this business motive, SNFs within Pierce County are working together to co-design and standardize care transition processes across the county. This behavior, seemingly counter-intuitive to their business imperative, is enabling participating SNFs to accelerate adoption of best practices and increase their facility's overall standard of care.

- Making Best Practices the Standard of Care: By using pressure from peers in a positive way, the Pierce County STAAR & Beyond Team has successfully engaged organizations and physicians from across the county in this work. For example, physicians actively engaged in the warm handover process at one hospital are insisting that this same process be spread to other hospitals within the county.

- Accurate and Timely Data: Qualis Health, the Washington State Quality Improvement Organization, has served as a tremendous resource to the Pierce County STAAR & Beyond Team. SNFs report outcomes data to Qualis Health, where improvement coaches are then able to analyze results and provide regular reports back to the team. Currently, the team is sharing blinded, facility-specific data to understand and learn from variation among involved facilities. SNFs have been encouraged to unblind data to enhance their learning about what process changes result in success.

Results

Pierce County's STAAR and Beyond Team decreased their aggregate 30-day readmission rate for Medicare patients discharged to SNFs by about 13 percent — from a baseline of 21.1 (Q4 2009 to Q3 2012) to a median rate of 18.3 in the most recent four quarters (Q4 2009 to Q3 2012). Several key interventions implemented have been annotated in this graph to assist with providing context and learning relative to change in the data.

VII. How-to Guide Resources

Note: All INTERACT II tools may also be accessed at http://interact2.net/tools.html.
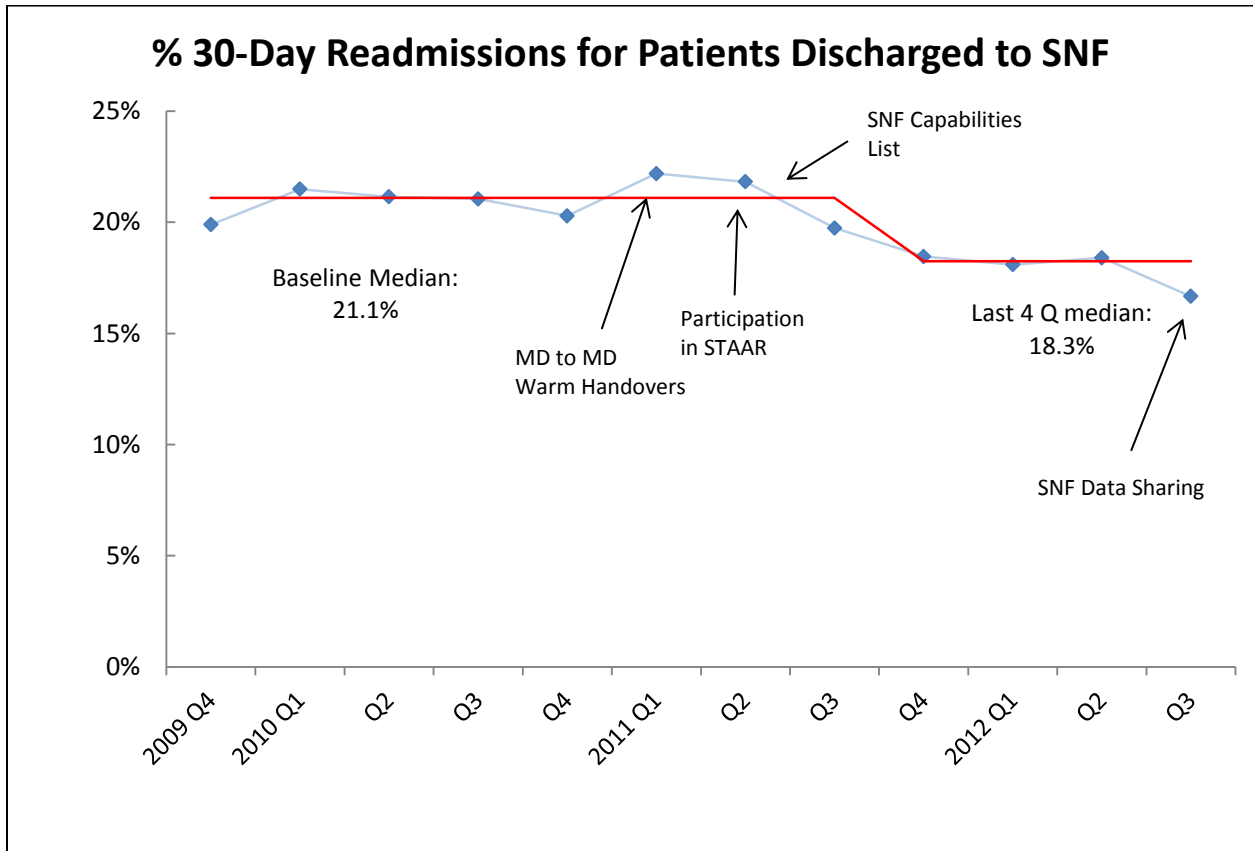
Summary of Typical Failures Observed in the Patient Transition from Hospital to Skilled Nursing Facility

Key Change 1: Ensure That SNF Staff Are Ready and Capable to Care for the Resident

Typical failures associated with ensuring that SNF staff are ready and capable to care for the resident include:

- Lack of adherence to or confusion about the transfer criteria specified by hospital staff;

- Lack of complete clinical information — medications, labs, physician orders, additional treatments requiring transportation (e.g., radiation therapy), special equipment needs (e.g. c-pap, oxygen, specialty wound supplies);

- Lack of understanding of the resident's functional health status and a failure to assess the resident's physical and cognitive needs (e.g., identifying underlying depression), which may result in transfer to a SNF facility that does not meet the resident's needs;

- Lack of experience of hospital staff with SNFs, and thus an inaccurate perception of the assets and limitations of a particular SNF; and

- Premature discharge from the hospital with unstable clinical condition.

Key Change 2: Reconcile the Treatment Plan and Proactively Plan for Condition Changes

Typical failures associated with the lack of reconciling the treatment plan planning for condition changes include:

- Lack of a clear picture of the resident's entire history, including the severity of the resident's condition and complications during hospitalization (e.g., C. difficile infection, pressure ulcers, urinary tract infection, delirium);

- Medication errors due to lack of clarity about the type, dose, and frequency of medications or failure to resume pre-hospitalization medications;

- Lack of timely delivery of medications;

- Variability of insulin protocols and blood glucose trigger points for alerting physicians;

- Incomplete warfarin management, delayed access to required lab results, and lack of follow-up plans or protocol to follow;

- Lack of key information from social workers, nursing staff, hospitalists, and house staff;

- Lack of hard copy narcotic prescriptions sent with the resident;

- Lack of clear advance directives (i.e., information beyond the basic Do Not Resuscitate [DNR] status) or inadequate use of palliative or hospice care; and

- Incomplete information sharing due to inaccurate interpretation of HIPAA regulations, limiting transfer of crucial information.

Key Change 3: Engage the Resident and Their Family Caregivers in a Partnership to Create an Overall Plan of Care

Typical failures in engaging the resident and family caregivers in a partnership for care planning include:

- Different expectations between the staff and the resident and his or her family caregivers regarding the short-term and long-term outcomes for SNF care, leading to gaps in care (e.g., family caregivers expect the resident to return home at some point, but the clinical providers do not).

- Lack of end-of-life conversations, including the options of palliative and hospice care.

- Assumption by the resident and family caregivers that a single individual (e.g., physician or nurse practitioner) is in charge of all of the resident's care and sees the big picture of his or her needs.

- Failure to actively include the resident and family caregivers in identifying needs, resources, and planning for transition to the SNF, leading to poor understanding of the resident's capacity to achieve care goals.

Diagnostic Worksheet: In-depth Review of Patients Who Were Readmitted

Part 1: Chart Reviews of Patients

Conduct chart reviews of the last five readmitted patients. Reviewers should be physicians or nurses experienced in the clinical setting and in chart review for quality and safety. Reviewers should not look to assign blame, but rather to discover opportunities to improve the care of patients. Worksheet Part 3 is a reference list of typical failures. The intent is to learn how we might prevent these failures that we once thought impossible to prevent.

Question	Patient #1	Patient #2	Patient #3	Patient #4	Patient #5
Number of days between the last discharge and this readmission date?	_____ **days**	_____ **days**	_____ **days**	_____ **days**	_____ **days**
Was the follow-up physician visit scheduled prior to discharge?	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐
If yes, was the patient able to attend the office visit?	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐
Were there any urgent clinic/ED visits before readmission?	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐
Functional status of the patient on discharge?	**Comments:**	**Comments:**	**Comments:**	**Comments:**	**Comments:**
Was a clear discharge plan documented?	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐
Was evidence of "Teach Back" documented	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐
List any documented reason/s for readmission	**Comments:**	**Comments:**	**Comments:**	**Comments:**	**Comments:**
Did any social conditions (transportation, lack of money for medication, lack of housing) contribute to the readmission?	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐	**Yes** ☐ **No** ☐

Diagnostic Worksheet: In-depth Review of Patients Who Were Readmitted
Part 1: Reflective Summary of Chart Review Findings

What did you learn?

What themes emerged?

What, if anything, surprised you?

What new questions do you have?

What are you curious about?

What do you think you should do next?

What assumptions about readmissions that you held previously are now challenged?

Diagnostic Worksheet: In-depth Review of Patients Who Were Readmitted
Part 2: Interviews with Patients, Family Members, and Care Team Members in the Community
If possible, conduct the interviews on the same patients from the chart review. Use a separate worksheet for each interview.

Ask Patients and Family Members:
How do you think you became sick enough to come back to the hospital?

Did you see your doctor or the doctor's nurse in the office before you came back to the hospital?

Yes ☐   If yes, which doctor (PCP or specialist) did you see? ☐   No ☐   If no, why not? ☐

Describe any difficulties you had to get an appointment or getting to that office visit.

Has anything gotten in the way of your taking your medicines?

How do you take your medicines and set up your pills each day?

Describe your typical meals since you got home.

Ask Care Team Members in the Community:
What do you think caused this patient to be readmitted?

After talking to the care team members about why they think the patient was readmitted, write a brief story about the patient's circumstances that contributed to the readmission.

Institute for Healthcare Improvement
How-to Guide: Improving Transitions from the Hospital to Skilled Nursing Facilities to Reduce Avoidable Rehospitalizations
Diagnostic Worksheet: In-depth Review of Patients Who Were Readmitted
Part 2: Summary of Interview Findings

What did you learn?

What themes emerged?

What, if anything, surprised you?

What new questions do you have?

What are you curious about?

What do you think you should do next?

What assumptions about readmissions that you held previously are now challenged?

IHI Observation Tool for the Transition to Skilled Nursing

Worksheet A: Chart Reviews of Admitted Residents

Conduct chart reviews of the last five residents admitted to your facility from an acute care hospital. Reviewers should be nurses or physicians that are actively involved in reviewing potential new admissions and would have access to screening documents for new admissions. Reviewers should not look to assign blame, but rather to discover opportunities to improve the care of residents.

Question	Resident #1	Resident #2	Resident #3	Resident #4	Resident #5
Did the SNF admissions nurse or admission coordinator assess and confirm the clinical needs of the resident prior to admission either by visiting the patient in the hospital or by consulting with hospital staff by phone? If yes, please describe how.	Yes No	Yes No	Yes No	Yes No	Yes No
Was the resident's clinical status re-evaluated once they were admitted and in the facility? If yes, please describe how.	Yes No	Yes No	Yes No	Yes No	Yes No

Question	Resident #1		Resident #2		Resident #3		Resident #4		Resident #5	
Was the resident's clinical status different from expected as based upon the pre-transfer assessment?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
How many discrepancies in the medication list and treatment plan were identified on admission? Note: Discrepancies represent gaps in our processes. The goal is to better understand discrepancies that occur and to test changes that will eliminate their occurrence.	Total number:		Total number:		Total number:		Total number:		Total number:	
Was a clear treatment plan documented?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Was a plan for responding to possible condition changes documented?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Was evidence of resident care goals documented?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

Question	Resident #1		Resident #2		Resident #3		Resident #4		Resident #5	
Were end-of-life care preferences documented?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Other important notes										

IHI Observation Tool for the Transition to Skilled Nursing

Worksheet: Reflective Summary of Chart Review Findings

What did you learn?

What themes emerged?

What, if anything, surprised you?

What new questions do you have?

What are you curious about?

What do you think you should do next?

What assumptions that you held previously are now challenged?

Quality Improvement Tool
For Review of Acute Care Transfers

INTERACT
Version II.0 Tool

The INTERACT QI Tool is designed to help you analyze hospital transfers and identify opportunities to reduce transfers that might be preventable. Complete this tool for each or a representative sample of hospital transfers in order to conduct a root cause analysis and identify common reasons for transfers. Examining trends in these data with the INTERACT QI Summary Tool can help you focus educational and care process improvement activities.

SECTION 1: Describe Resident Characteristics

Resident ID _____ Age _____

Date of *most recent* admission to nursing home _____ /_____ /_____

a. Major diagnoses at admission _____

b. Conditions that put the resident at risk for hospital admission or readmission:

☐ Hospitalization within the last 6 months
☐ COPD
☐ Polypharmacy (e.g. 9 or more medications)
☐ Surgical complications
☐ Fracture

☐ CHF
☐ Cancer, on active chemo or radiation therapy
☐ Multiple co-morbidities (e.g. CHF, COPD and DM in the same patient; or multiple active diagnoses)
☐ Other (describe)

_____
_____

c. Resident hospitalized in the *past 30 days?*   ☐ No   ☐ Yes (list dates and reasons)

_____
_____

d. Resident hospitalized in the *past 12 months?*   ☐ No   ☐ Yes (list dates and reasons)

_____
_____

SECTION 2: Describe the Acute Change in Condition and Other Non-Clinical Factors that Contributed to the Transfer

a. Date the change in condition first noticed _____ /_____ /_____

b. Briefly describe the change, symptom, sign or other factor(s) that led to the transfer and then check each item below that applies

_____
_____
_____

(continued on reverse side)

Nursing Home Capabilities List

INTERACT
Version 3.0 Tool

This list is for hospital emergency rooms, hospitalists, and case managers; and for physicians, NPs, and PAs who take off-hours call for the facility to assist with decisions about hospital admission or return to the facility.

Facility _____

Address _____

Tel (_____) _____ **Key Contact** _____

Circle 'Y' for yes or 'N' for no to indicate the availability of each item in your facility.

Capabilities	Yes	No	Capabilities	Yes	No
Primary Care Clinician Services			**Nursing Services**		
At least one physician, NP, or PA in the facility three or more days per week	Y	N	Frequent vital signs (e.g. every 2 hrs)	Y	N
At least one physician, NP, or PA in the facility five or more days per week	Y	N	Strict intake and output (I&O) monitoring	Y	N
			Daily weights	Y	N
Diagnostic Testing			Accuchecks for glucose at least every shift	Y	N
Stat lab tests with turnaround less than 8 hours	Y	N	INR	Y	N
Stat X-rays with turnaround less than 8 hours	Y	N	O2 saturation	Y	N
EKG	Y	N	Nebulizer treatments	Y	N
Bladder Ultrasound	Y	N	Incentive spirometry	Y	N
Venous Doppler	Y	N			
Cardiac Echo	Y	N	**Interventions**		
Swallow Studies	Y	N	IV Fluids (initiation and maintenance)	Y	N
			IV Antibiotics	Y	N
Consultations			IV Meds – Other (e.g. furosemide)	Y	N
Psychiatry	Y	N	PICC Insertion	Y	N
Cardiology	Y	N	PICC Management	Y	N
Pulmonary	Y	N	Total Parenteral Nutrition (TPN)	Y	N
Wound Care	Y	N	Isolation (for MRSA, VRE, etc…)	Y	N
Other Physician Specialty Consultations specify:	Y	N	Surgical Drain Management	Y	N
			Tracheostomy Management	Y	N
Social and Psychology Services			Analgesic Pumps	Y	N
Licensed Social Worker	Y	N	Dialysis	Y	N
Psychological Evaluation and Counseling by a Licensed Clinical Psychologist	Y	N	Advanced CPR (ACLS capability)	Y	N
			Automatic Defibrillator	Y	N
Therapies on Site			**Pharmacy Services**		
Occupational	Y	N	Emergency kit with common medications for acute conditions available	Y	N
Physical	Y	N	New medications filled within 8 hours	Y	N
Respiratory	Y	N	**Other Specialized Services (specify)**		
Speech	Y	N			

STEP I Medication Reconciliation on Admission

Please Complete on All New Admissions

Patient MR#	Date of Admission	Did you find a discrepancy between the medications listed on page I referral form, the hospital discharge summary, the medication list provided by family or previous MAR		How did you resolve the discrepancy?								How did you communicate unresolved discrepancies?			
		Yes	No	Called nurse in hospital to clarify	Called MD in hospital to clarify	Called family to clarify	Called primary care MD to clarify	Called outpatient pharmacy to clarify	Called admitting MD or NP for facility and made them aware	Discrepancy not resolved this shift	Other	Told Supervisor	Told next shift	Told MD	Other

STEP I
Quality Improvement Form: Medication Reconciliation

Facility: _____   Month Covered: _____   Initials_____

Week	Date:	# Admissions	# Yes responses re: discrepancy	# Discrepancies not resolved
Week 1				
Week 2				
Week 3				
Week 4				
Total			% of 2 =	% of 3 =
Goal				

Instructions: Tally responses from Medication Reconciliation Tool on Admission and fill in columns above.

Tab 12 – Reconciliation

STEP 2 → **Prior to Starting Reconciliation Process**
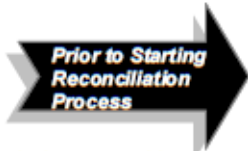
- **Find area free of distraction**
- **Assemble all relevant documentation:**
  dc summary, page 1, most recent MAR

1. List full patient name, allergies, d.o.b. or use addressograph stamp or sticker list what allergy is to medication (i.e. rash, hives, GI upset)

2. List date and time of admission and from where patient was admitted. Include name of community PCP or previous MD in nursing home.

3. Copy medications listed on page 1, reported by patient, family or written on prescription bottle onto this column.

4. Using all available documentation, compare list of medications in Column 1 to admission orders, dc summary, MAR. Compare all elements and note if they match on each source: admission orders, dc summary, previous MAR.

List all medications identified on page 1 reported by family, patient, med bottles, include dose, frequency, route and prn medications	Do all medication elements match?			If "No," which element requires review?				Outcome of review of discrepancy (orders written on physian order sheet)		
	Admitting orders	DC Summary	MAR if readmit	Drug	Dose	Frequency	Route	Continue Drug	Discontinue Drug	Modify Order
Lasix 60 mg p.o. qd	Y	Y	N		✓			✓		

Mark "Y" for Yes.   **Mark "N" for No.**

5. If "No" response to any aspect of Step 4, note which element does not match.
   a. Example, Lasix 60mg previous MAR dose 40mg -- New Dose
   b. Cipro 250 mg not on previous MAR because started in hospital—New Drug

6. Discrepancy must be reviewed and any changes in medications written on physician order sheet. Sources for review: patient, family, community or hospital physician, ordering provider in NH

7. Look at page 1, diagnosis summary, previous MAR if available. Is there a corresponding diagnosis to support medication ordered?
   a. ✓ "Y" for Yes   ✓ "N" for No

8. If no diagnosis to support use of medication, utilize all available sources including patient, family, hospital and community physicians. If diagnosis identified, add to diagnosis list.

9. Are any labs or monitoring parameters ordered?
   a. Reconciliation Tool should be completed within 24 hours.
   b. Reconciliation Tool should be completed by individual with demonstrated competency and knowledge about medication process. Consider focused training for charge nurses, supervisors and have specific individuals responsible for doing.

Tab 12 – Reconciliation

Admission/Readmission Medication Reconciliation Form

② **Facility Name** _____

Admitted From _____

Admission Date _____ **Time** _____

① **Name:**

Allergies:

Date of Birth:

Community or NH PCP:

STEP 3

③ List all medications identified on page I reported by family, patient, med bottles, include dose, frequency, route and prn medications	④ Do all medication elements match? "Y –Yes "N"-No			⑤ If "No," which element requires review?				⑥ Outcome of review of discrepancy (orders written on physian order sheet)			⑦ Is there a diagnosis in dc summary, page I to support med ordered?		⑧ If "No," seek info from providers in hospital, community, physician, family, patient & document diagnosis or rationale on order sheet	⑨ Any labs or monitoring ordered	
	Admitting orders	DC Summary	MAR (if readmit)	Drug	Dose	Frequency	Route	Continue Drug	Discontinue Drug	Modify Order	Yes	No		Yes	No

Signature: _____

Date & Time: _____

Adapted from Children's Hospital San Diego Medication Coordination Form

Medication Reconciliation Worksheet for Post-Hospital Care

INTERACT
Version 3.0 Tool

Part 1: Hospital Recommended Medications Needing Clarification

Medications Recommended by Hospital at Discharge for which Clarification is Needed	Clarification Needed *	Resolution for Final Medication Orders (Continue, Stop, Change)

*Examples: unclear diagnosis or indication, uncertain dose or route of administration, stop date, hold parameters, lab tests needed for monitoring, dose different than before hospitalization, medication duplication

Part 2: Medications Prior to Hospitalization Needing Clarification

Medications Taken Before Hospitalization Not Currently on Hospital-Recommended List	Comments (e.g. reason for the medication before hospitalization, and reason it was stopped in the hospital, if known)	Resolution for Final Medication Orders (Continue, Stop, Change)

Residents Name _____ **Date** _____/_____/_____

Advance Care Planning Tracking Form

INTERACT
Version 3.0 Tool

Resident Name _____

Residents and/or their responsible health care decision makers should be provided the opportunity to discuss advance care planning with appropriate staff members and medical providers within the first few days of admission to the facility, at times of change in condition, and periodically for routine updating of care plans. The purpose of this form is to provide a tool to document that these discussions are taking place.

At Admission (within about a week of admission or readmission)

Check one of the following:
- ☐ Resident and/or responsible party did NOT want to have this discussion
- ☐ Discussion about advance care planning held with (check one or both of the following):
- _____ Resident
- _____ Resident's surrogate; name:_____

Staff or healthcare provider completing form:

Name_____ Title _____

Signature_____ Date of discussion _____/_____/_____

Location of Advance Care Plan documentation (i.e. advance directive tab, plan of care, progress notes, etc…):

_____

_____

_____

Use Continuation Pages to document additional Advance Care Planning Reviews and Discussions

Partnering with Patients and Families to Accelerate Improvement Readiness Assessment

Name of Organization_____

Area	Current Experience: Make a mark (an X, a circle, or anything that is easy to read) in the box that best describes your team or organization's experience.		
Data transparency	We have not discussed the possibility of sharing performance data with patients and family caregivers.	Our team is comfortable with sharing improvement data with patients and families related to the current improvement project.	This organization has experience with sharing performance data with patients and families.
Flexibility around the aims and specific changes of the improvement project	We have limited ability to refine the project's aims or planned changes.	We have some flexibility to refine the project's aims and the planned changes.	We are open to changing both the aims and specific changes that we test based on patient and family team members' perspectives.
Underlying fears and concerns	We have not discussed our concerns about involving patient and families on improvement teams.	We have identified several concerns related to involving patients and families on improvement teams, but have no plan for how to address or manage them.	We have a plan to manage and/or mitigate issues that may arise due to patient and family caregiver involvement on our team.
Perceived value and purpose of patient and family involvement	There is no clear agreement that patient and family involvement on improvement teams is necessary to achieve our current improvement aim.	A few of us believe patient and family involvement would be beneficial to our improvement work, but there is not universal consensus.	There is clear recognition that patient and family involvement is critical to achieving our current improvement aim.

Senior leadership support for patient and family involvement	Senior leadership do not consider patient and family involvement a top priority.	Senior leaders are aware of and communicate support for patient and family involvement in our team.	Senior leaders consider our participation in this program as a pilot for organizational spread.
Experience with patient and family involvement	Beyond patient satisfaction surveys or focus groups, our organization does not have a formal method for patient and family feedback.	We have an active patient and family advisory panel.	Patient and families are members of standing committees and make decisions at the program and policy level.
Collaboration and teamwork	Staff in this organization occasionally work in multidisciplinary teams to provide care.	Staff in this organization work effectively across disciplines to provide care to patients.	Patients and families are included as valued members of the care team in this organization.

1. What supports moving in this direction?

2. What are your current challenges?

3. How confident are you on successfully involving patients and families on your team (1-10 scale)?

AKRON REGIONAL HOSPITAL ASSOCIATION

Revised 2/21/2007

- ☐ Affinity Doctors
- ☐ Affinity Massilon
- ☐ Akron City Hospital
- ☐ Akron Children's Hospital
- ☐ Akron General Medical Center
- ☐ Barberton Citizens Hospital
- ☐ Cuyahoga Falls General
- ☐ Edwin Shaw Rehab
- ☐ Lodi Community Hospital
- ☐ Medina General Hospital
- ☐ Mercy Medical Center
- ☐ Regency Hospital - Barberton
- ☐ Regency Hospital - Ravenna
- ☐ Robinson Memorial Hospital
- ☐ Saint Thomas Hospital
- ☐ Select Specialty - Mercy
- ☐ Select Specialty - AGMC
- ☐ Select Specialty - SHS
- ☐ WRH Health System

POST-ACUTE TRANSFER FORM - PHYSICIAN ORDERS
MEDICAL INFORMATION

Patient's Name

Last — First

Primary Diagnosis

Secondary Diagnosis

SUMMARY OF PRESENT ILLNESS/SIGNIFICANT TESTS, TREATMENTS, AND PROCEDURES - INCLUDE SURGERIES AND DATES:

Prognosis ☐ GOOD ☐ FAIR ☐ POOR

Patient Aware ☐ YES ☐ NO Responsible Party Aware YES ☐ NO ☐

REHABILITATION POTENTIAL (REQUIRED FOR ADMISSION) ☐ GOOD ☐ FAIR ☐ POOR

HISTORY AND PHYSICAL (MUST BE WITHIN 5 DAYS OF DISCHARGE

☐ YES ☐ NO (If No, Please Update)

DIET AND NUTRITIONAL NEEDS

- ☐ Diet
- ☐ Tube Feedings
- ☐ Hyperalimentation
- ☐ Supplements

ALLERGIES (LIST):

DISCHARGE MEDICATIONS	DOSE/FREQUENCY/ROUTE

SPECIAL CARE ORDERS

- ☐ ENEMAS PRN
- ☐ O2 LITER FLOW:
- ☐ IV CARE/PICC Date:

Length: Site: Verified by X-ray ☐ YES ☐ NO

- ☐ WOUND CARE/DRESSING CHANGES

- ☐ SUCTION
- ☐ RESPIRATORY CARE
- ☐ VENTILATOR/SETTINGS

TV _____ PEEP _____ PCO2 _____ SaO2 _____ SIMV _____

- ☐ Additional Orders - Includes Tubes, Foleys, IVs

LAB WORK

SAFETY

- ☐ RESTRAINTS
- ☐ SITTER
- ☐ WANDERS
- ☐ SIDERAILS
- ☐ ISOLATION
- ☐ HIGH RISK FOR FALLS

THERAPIES

☐ PT ☐ OT ☐ ST ☐ RT

ACTIVITY/WEIGHT BEARING (WB)

- ☐ UP AD LIB
- ☐ BED REST
- ☐ WB AS TOLERATED
- ☐ TOE TOUCH - WB
- ☐ UP WITH ASSIST
- ☐ HOB UP 30 DEGREES
- ☐ NON-WB
- ☐ PARTIAL - WB
- ☐ ASSISTIVE DEVICES
- ☐ Cane ☐ Walker ☐ Wheelchair ☐ Crutches
- ☐ Follow up Appointments:

PHYSICIAN INFORMATION

To the best of my knowledge, all information provided is true and accurate
The patient's stay is for convalescense and is expected to be less
than 30 days in duration: ☐ YES ☐ NO

I certify that in-patient care is required at a level of:
- ☐ LT ACUTE CARE ☐ ACUTE REHAB ☐ SNF ☐ ICF
- ☐ ASSISTED LIVING ☐ HOME CARE ☐ HOSPICE CARE
and approve of the plan of care and discharge path.

Physician Signature Date

Print Physician Name

Physician will follow: ☐ YES ☐ NO

Discharge Date from Hospital

Attending Physician Name

Phone Pager

☐ See Attached for Additional Orders

DEMOGRAPHICS ON PATIENT

PATIENT INFORMATION

TRANSFERRED TO FACILITY/AGENCY

PATIENT'S NAME   TELEPHONE
LAST: FIRST:

ADDRESS

CITY   STATE   ZIP CODE

AGE   BIRTHDATE   SEX   MARITAL STATUS
                        ☐ M ☐ F   ☐ M ☐ S ☐ D ☐ W

SOCIAL SECURITY #   MEDICARE #   MEDICAID #

OTHER INSURANCE   INS #   AUTH #

IN PATIENT   FROM   TO
HOSPITAL ADMISSION DATES

PREVIOUS LIVING ARRANGEMENTS
☐ Lives Alone   ☐ Hospice
☐ Family   ☐ Home/ Home Care
☐ Home with Care Giver   ☐ Passport
AGENCY _____ # _____

      PRIMARY CONTACT   _____
☐ DPOA/HC
☐ DPOA
☐ Legal Guardian
      RELATIONSHIP TO PATIENT   _____

ADDRESS

CITY   STATE   ZIP CODE

HOME PHONE   WORK   CELL PHONE

SECONDARY CONTACT/NEXT OF KIIN
NAME   PHONE
            WHO WAS NOTIFIED OF TRANFER ?

TREATMENT RECEIVED WITHIN LAST 14 DAYS		DATE LAST RECEIVED
Chemotherapy	☐ YES	
Dialysis	☐ YES	
IV Medications	☐ YES	
Oxygen therapy	☐ YES	
Transfusions	☐ YES	
Radiation	☐ YES	
Ventilator	☐ YES	
Tracheotomy Care	☐ YES	
Suctioning	☐ YES	
Pneumonia Vaccine	☐ YES	
Flu Vaccine	☐ YES	
Mantoux	YES	
Vital Signs	Range:	
Last Blood Sugar	Result:	
Date:		
Last Pulse Ox (Sa02)	Result:	
Date:		

PAIN ASSESSMENT
☐ None ☐ Acute ☐ Chronic ☐ Intermittent ☐ Sharp ☐ Dull
☐ Other (explain)
LOCATION:
INTENSITY (1 - 10)

ISOLATION		SITE	
☐ MRSA	☐ VRE	☐ CDIFF	☐ ESBL

Site:

Other Instructions:

PERSONAL POSSESSIONS SENT WITH PATIENT ON DAY OF TRANSFER
☐ Glasses   ☐ Purse/ Wallet
☐ Dentures/ Partials   ☐ Medications
☐ Hearing Aid   ☐ Walker/ Cane
☐ Other _____

Signature of Person Completing Form: Date:

SW/ Case Manager Signature: Date:

Unit Phone Number:

Activities of Daily Living

Activity	Independent	Supervison	Assist/ # Persons	Unable to Do
Turns Self				
Sits				
Bed to Wheelchair				
Transfers				
Ambulation				
Bathing				
Feeding				
Dressing				
Dental Care				
Bedpan				
Bathroom				
Bedside Commode				

HEIGHT _____   WEIGHT _____ DATE _____

CONTINENT BLADDER   ☐ YES   ☐ NO
☐ CATHETER   SIZE   TYPE _____
☐ SUPRAPUBIC   SIZE _____   TYPE _____
DATE INSERTED/ CHANGED _____

CONTINENT BOWEL   ☐ YES   ☐ NO LAST BM _____
OSTOMY - TYPE _____   DATE CHANGED _____
APPLIANCE

APPETITE/ NUTRITIONAL	DISABILITIES
☐ GOOD	☐ AMPUTATION
☐ FAIR	☐ PROSTHESIS
☐ POOR	☐ PARALYSIS
☐ HYPERALIMENTATION	☐ PARESIS
☐ FEEDING TUBE	☐ CONTRATURES

MENTAL STATUS	BEHAVIOR
☐ ALERT	☐ COOPERATIVE
☐ ORIENTED	☐ BELLIGERENT
☐ DISORIENTED	☐ COMBATIVE
☐ FORGETFUL	☐ NOISY
☐ UNRESPONSIVE	☐ ABUSIVE
☐ DEPRESSED	☐ PASSIVE

SENSORY IMPAIRMENTS
VISION   ☐ ADEQUATE ☐ POOR   ☐ BLIND
HEARING   ☐ ADEQUATE ☐ POOR   ☐ DEAF
HEARING AID   ☐ L   ☐ R
SPEECH   ☐ CLEAR   ☐ DIFFICULT ☐ APHASIA
☐ SPEAKS ENGLISH
☐ INTERPRETER REQUIRED

SKIN CARE
SKIN INTACT?   ☐ Y   ☐ N
DESCRIBE DECUBITUS/ WOUND - SIZE [CMs], SITE, DRAINAGE

DNR: TRANSFERRING FACILITY [ATTACH COPY]
☐ YES   ☐ NO
DNR STATUS   ☐ CC   ☐ CCAREST ☐ OTHER DRN

ADVANCE DIRECTIVES [ATTACH COPY]
LIVING WILL   ☐ YES   ☐ NO
DURABLE POWER OF ATTORNEY/HC   ☐ YES   ☐ NO

SMOKING CESSATION ADDRESSED   ☐ YES   ☐ NO

AKRON REGIONAL HOSPITAL ASSOCIATION

PATIENT'S NAME
LAST: _____   FIRST: _____

PHYSICIAN ORDERS CONTINUED

Date: _____   Time: _____

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Physician Name [Print]: _____   Date: _____

Physician Signature: _____   Phone/Pager: _____

OTHER INFORMATION

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Name [Print]: _____   Date: _____

Signature: _____   Phone/Pager: _____

AKRON REGIONAL HOSPITAL ASSOCIATION

AKRON REGIONAL HOSPITAL ASSOCIATION

POST ACUTE TRANSFER FORM

COPY AND SEND TO THE NURSING FACILITY IN THE ORDER LISTED

Chart Form	Content Needed for Admission	Check Off
Post Acute Skilled Transfer Form	Make sure the secondary payer source area is completed	
MARs	Include the most recent MAR and MARs that have the last dose of an IV med, injections or any chemo (IV or PO). Documentation of blood transfusions	
PT, OT, Speech & Respiratory Therapy	Include the evaluation and notes for last week of stay	
Nutrition Evaluation Form		
Medications	If not individually listed on form, attach computerized listing	
DNR Order Sheet	Either the state form or the hospital form if applicable	
Advanced Directives	Copies of Living Will and/or Durable Power of Attorney for Health Care if on chart	
Physician's Progress Notes	Notes from last 3-4 days	
Nurse's notes/Social Work Notes	Notes from last 2 days; include discharge planning notes; notes including detail on PICC line insertion	
Consultations	A copy of each consult	
Laboratory Results	Most recent labs, including U/A, C&S, CBC, electrolytes, labs used to track dosing of meds (ex; Theophylline/Dilantin level, INRs), MANTOUX	
CXR, EKG	Include most recent	
Cookie Swallow, MRIs, CT Scans	If done, most recent	
H&P and Nursing Assessment with home med sheet	If H&P is dated prior to 5 days before discharge, physician must review, sign, and date	
PASARR ID	Completed Form & results	

Nursing Home to Hospital Transfer Form

INTERACT
Version II.0 Tool

Resident Name *(last, first, middle initial)* _____
Language: ☐ English ☐ Other _____ Resident is: ☐ SNF/rehab ☐ Long-term
Date Admitted *(most recent)* ____/____/____ DOB ____/____/____
Primary diagnosis(es) for admission_____

Sent To *(name of hospital)* _____
Date of transfer ____/____/____
Sent From *(name of nursing home)* _____ Unit _____

Contact Person_____
Relationship *(check all that apply)*
☐ Relative   ☐ Health care proxy   ☐ Guardian   ☐ Other
Tel (_____)_____
Notified of transfer?   ☐ Yes   ☐ No
Aware of clinical situation?   ☐ Yes   ☐ No

Who to Call at the Nursing Home to Get Questions Answered
Name/Title _____
Tel (_____)_____

Primary Care Clinician in Nursing Home   ☐ MD   ☐ NP   ☐ PA
Name _____
Tel (_____)_____

Code Status   ☐ Full Code   ☐ DNR   ☐ DNI   ☐ DNH   ☐ Comfort Care Only   ☐ Uncertain

Key Clinical Information
Reason(s) for transfer _____
Is the primary reason for transfer for diagnostic testing, not admission?   ☐ No   ☐ Yes   Tests:_____
Relevant diagnoses   ☐ CHF   ☐ COPD   ☐ CRF   ☐ DM   ☐ Ca *(active treatment)* ☐ Dementia   ☐ Other _____
Vital Signs   BP _____ HR _____ RR _____   Temp _____ O2 Sat _____ Time taken *(am/pm)*_____
Most recent pain level   _____   (☐ N/A)   Pain location: _____
Most recent pain med   _____   Date given ____/____/____   Time *(am/pm)* _____

Usual Mental Status:
☐ Alert, oriented, follows instructions
☐ Alert, disoriented, but can follow simple instructions
☐ Alert, disoriented, but cannot follow simple instructions
☐ Not Alert

Usual Functional Status:
☐ Ambulates independently
☐ Ambulates with assistive device
☐ Ambulates only with human assistance
☐ Not ambulatory

Additional Clinical Information:
☐ SBAR Acute Change in Condition Note Included
☐ Other clinical notes included
For residents with lacerations or wounds:
Date of last tetanus vaccination *(if known)* ____/____/____

Devices and Treatments
☐ O2 at _____ L/min by ☐ Nasal canula ☐ Mask (☐ Chronic ☐ New)
☐ Nebulizer therapy;   (☐ Chronic   ☐ New)
☐ CPAP   ☐ BIPAP   ☐ Pacemaker ☐ IV   ☐ PICC line
☐ Bladder (Foley) Catheter (☐ Chronic   ☐ New) ☐ Internal Defibrillator
☐ Enteral Feeding   ☐ TPN   ☐ Other _____

Isolation Precautions
☐ MRSA   ☐ VRE
Site _____
☐ C. difficile   ☐ Norovirus
☐ Respiratory virus or flu
☐ Other _____

Allergies
_____
_____
_____
_____
_____

Risk Alerts
☐ Anticoagulation   ☐ Falls   ☐ Pressure ulcer(s)   ☐ Aspiration   ☐ Seizures
☐ Harm to self or others   ☐ Restraints   ☐ Limited/non-weight bearing: (☐ Left ☐ Right)
☐ May attempt to exit   ☐ Swallowing precautions   ☐ Needs meds crushed
☐ Other _____

Personal Belongings Sent with Resident
☐ Eyeglasses   ☐ Hearing Aid
☐ Dental Appliance   ☐ Jewelry
☐ Other _____
_____

Nursing Home Would be able to Accept Resident Back Under the Following Conditions
☐ ER determines diagnoses, and treatment can be done in NH   ☐ VS stabilized and follow up plan can be done in NH
☐ Other _____

Additional Transfer Information on a Second Page:
☐ Included   ☐ Will be sent later

Form Completed By *(name/title)* _____ **Signature** _____
Report Called in By *(name/title)* _____
Report Called in To *(name/title)* _____ Date ____/____/____ Time *(am/pm)*_____
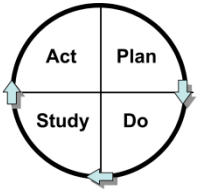
PDSA Worksheet

Date _____

Change or idea to be tested:

Objective for this PDSA cycle:

What question(s) do we want to answer on this PDSA cycle?

Plan:
Plan to answer questions (described above):
Who, What, When, Where

Plan for collection of data (Information needed to answer questions):
Who, What, When, Where

Predictions (For each question listed above, what will happen if plan is carried out? Describe your theories):

Do:
Carry out the plan; document problems and unexpected observations; collect data and begin analysis.

Study:
Complete analysis of data; What were the answers to the questions in the plan? (Compare to your predictions.) Summarize what was learned.

Act:
What changes are to be made? Plan for the next cycle.
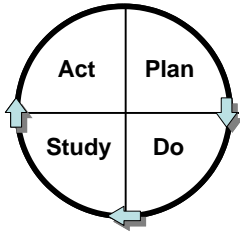
PDSA Form – EXAMPLE Completed Form

Change or idea to be tested:

Warm handover communication with the hospital to confirm/clarify condition and treatment plan for patients admitted to skilled nursing from the hospital.

Objective for this PDSA cycle:

Hold a direct conversation with the hospital nurse (or case manager) knowledgeable about the patient's treatment in the hospital to discuss his/her condition and confirm/clarify treatment plan and care needs.

What question(s) do we want to answer on this PDSA cycle?

- Can SNF nurse reach someone who is knowledgeable about the resident?
- Will the conversation yield new and valuable information about the resident's condition?
- Will the SNF be able to provide better care to the resident with this information?

Plan:

Plan to answer questions (described above):
Who, What, When, Where
By next Tuesday, the nursing director at the SNF will draft a set of questions for a warm handover communication.

- Ideas for inclusion: What is the patient's current status? What do we need to know about the his/her treatment and any complications during hospitalization? Do you have any concerns about this patient? How is the patient's family involved? Who are the key learners? What do they understand and not understand about their condition and treatment plan? What co-morbidities should we be concerned about? What conversations have you had with the patient and family about their desires and wishes related to care?

On the next resident being admitted from the hospital, the SNF admitting nurse receiving the patient from the hospital will review transfer material and call the discharge coordinator at the hospital and ask to speak with the nurse or case manager most recently caring for the patient being discharged. The SNF admitting nurse will use the developed outline to obtain information about the patient.

Within 24 hours of the transfer, team will convene to review the learning from the test.

Plan for collection of data (information needed to answer questions):
Who, What, When, Where
SNF nursing director and admitting nurse will collect the responses to the questions below and meet 24 hours after the transfer to review.

- Did the warm handover communication occur?
- Did the SNF obtain all information needed to adequately care for the resident?
- What information was not obtained through the warm handover communication?

Predictions (For each question listed at the top of the form, what will happen if plan is carried out? Describe your theories.)

Can the SNF nurse reach someone who is knowledgeable about the resident?
We predict that this will go smoothly on daytime shifts during the week. We anticipate it will be more difficult on nights and weekends and during shift changes.

Will the conversation yield new and valuable information about the resident's condition?
We predict we will be able to better resolve any discrepancies in the treatment plan and medication list, as well as obtain additional insight into the patient's treatment during their stay in the hospital.

Will the SNF be able to provide better care to the resident with this information?
We predict that the nurses and nursing assistants will be able to provide better care to the resident with a more accurate treatment plan and a better understanding of the resident's history, insight into his/her social support network, and his/her care preferences as may have been communicated while in the hospital.

Do:
Carry out the plan; document problems and unexpected observations; collect data and begin analysis.
The SNF team (nursing director, admitting nurse, and resident care team) carried out the test. The admitting nurse contacted the hospital with the next incoming resident (occurred on Tuesday at 1PM) and was able to speak with a floor nurse about the resident. She learned that the patient fell while in the hospital, resulting in a broken femur. The patient was very concerned about regaining mobility in time to attend her granddaughter's wedding in three month's time. The admitting nurse also learned that the resident's family (two sons and a daughter) lived in other parts of the country and so she did not have a local support network.

Study:
Complete analysis of data; What were the answers to the questions in the plan (compare to your predictions)? Summarize what was learned.
Each of our predictions (described in the table above) were true in the case of this test. We do anticipate that there may be difficulty reaching the floor nurse in the evening, weekends, or during changes in shift.

Act:
What changes are to be made? Plan for the next cycle.
We will continue to run this test with the next five admissions from the hospital to see how the process works in varying conditions. We are particularly interested in testing with an admission that occurs at night, on the weekend, or during shift change.

Spread Tracker Template

EXAMPLE:

A=Planning B= In Progress C=Fully Implemented					
			Sites		
	Pilot Unit 1	*Pilot Unit 2*	*Spread Unit 1*	*Spread Unit 2*	*Spread Unit 3*
Brief Description of Change					
Warm handover with hospital for incoming residents	C	C	B	B	A
Reconcile medication list upon admission	C	B	A	A	A
Identify goals of care with resident and family	B	C	B	A	A

A=Planning B=In Progress C= Fully Implemented

	Pilot Unit 1	Pilot Unit 2	Spread Unit 1	Spread Unit 2	Spread Unit 3
Brief Description of Change					

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