



How-to Guide:

Creating an Ideal Transition Home

Support for the *How-to Guide: Creating an Ideal Transition Home* was provided by a grant from The Commonwealth Fund.

Copyright © 2009 Institute for Healthcare Improvement

All rights reserved. Individuals may photocopy these materials for educational, not-for-profit uses, provided that the contents are not altered in any way and that proper attribution is given to IHI as the source of the content. These materials may not be reproduced for commercial, for-profit use in any form or by any means, or republished under any circumstances, without the written permission of the Institute for Healthcare Improvement.

How to cite this document:

Nielsen GA, Rutherford P, Taylor J. *How-to Guide: Creating an Ideal Transition Home*. Cambridge, MA: Institute for Healthcare Improvement; 2009. Available at <http://www.ihl.org>.

Acknowledgements

The Commonwealth Fund is a national, private foundation based in New York City that supports independent research on health care issues and makes grants to improve health care practice and policy. The views presented here are those of the author and not necessarily those of The Commonwealth Fund, its directors, officers, or staff.

The Institute for Healthcare Improvement (IHI) is a not-for-profit organization leading the improvement of health care throughout the world. Founded in 1991 and based in Cambridge, MA, IHI is a catalyst for change, cultivating innovative concepts for improving patient care and implementing programs for putting those ideas into action. Thousands of health care providers, including many of the finest hospitals in the world, participate in IHI's groundbreaking work.

The Robert Wood Johnson Foundation provided support for developing this document through Transforming Care at the Bedside, a national program of the Robert Wood Johnson Foundation and the Institute for Healthcare Improvement.

Co-Authors

Gail A Nielsen, BSHCA, IHI Fellow, Education Administrator – Clinical Performance Improvement, Iowa Health System (*Lead Author*)

Pat Rutherford, MS, RN, Vice President, Institute for Healthcare Improvement

Jane Taylor, EdD, Improvement Advisor, Institute for Healthcare Improvement

Contributors and Reviewers

Barbara Balik, RN, EdD, Common Fire Healthcare Consulting

Amy Boutwell, MD, MPP, Content Director, Institute for Healthcare Improvement

Peg M. Bradke, RN, MA, Director of Heart Care Services, St. Luke's Hospital, Iowa Health System

David Chen, RPh, MBA, Director, Pharmacy Practice Managers, American Society of Health-System Pharmacists

Eric A. Coleman, MD, MPH, Professor and Director, Care Transitions Program

Valerie Edison, RN, BSN, MPA, Quality Manager, Iowa Health Home Care

Frank A. Federico, RPh, Executive Director, Institute for Healthcare Improvement

Stephen F. Jencks, MD, MPH, Consultant in Healthcare Quality and Safety

Kenneth A. LaBresh, MD, FAHA, FACC, Principal, Blackstone Health Consulting

Mary Naylor, PhD, FAAN, RN, University of Pennsylvania School of Nursing

Lorna Newman, Project Manager, Institute for Healthcare Improvement

Marie W. Schall, MA, Director, Institute for Healthcare Improvement

Diane W. Shannon, MD, MPH, Consulting Medical Writer

Valerie Weber, Institute for Healthcare Improvement

Mark Williams, MD, Chief, Division of Hospital Medicine, Northwestern University Feinberg School of Medicine

Introduction

The Institute for Healthcare Improvement (IHI), through a grant supported by The Commonwealth Fund, will soon commence a four-year, multi-state initiative to measurably reduce avoidable rehospitalizations. The primary aims of the project for its first two years will be the creation of a robust learning community and the provision of targeted technical assistance. Development of a multi-state learning community will provide an opportunity for participants to learn from content experts and peers about how to best implement front-line process improvements in transitions in care. IHI experts in improvement, change, transitions of care, and reliability will provide targeted technical assistance in select high-priority areas to address systemic barriers to reducing avoidable rehospitalizations. This guide was created to support participating individuals and organizations in their work over the course of this initiative and beyond to improve transitions of care.

The Case for Creating an Ideal Transition Home

Hospitalizations account for nearly one-third of the total \$2 trillion spent on health care in the United States.^{1, 2} In the majority of cases, hospitalization is necessary and appropriate. However, experts estimate that as many as 20 percent of US hospitalizations are rehospitalizations within 30 days of discharge.^{1, 2} These rehospitalizations are costly, potentially harmful, and often avoidable.

Poorly executed transitions in care negatively affect patients' health, well-being, and family resources, and unnecessarily increase the costs incurred by the health care system and the patients, families, and communities they serve. Maintaining continuity in patients' medical care is especially critical following discharge from the hospital, and for older patients with multiple chronic conditions, this "handoff" period takes on even greater importance. Research shows that one-quarter to one-third of these patients have to return to the hospital due to complications that could have been prevented.³

Avoidable hospitalizations typically occur due to one of 15 "ambulatory care sensitive conditions"—conditions that might have been prevented with either timely access to quality outpatient care or adoption of healthy behaviors. One aim of the hospital discharge process is to establish care in a new setting. Unplanned rehospitalizations may signal a failure in this process.

Evidence suggests that several specific interventions reduce the rate of avoidable rehospitalization: improving core discharge planning and transition processes out of the hospital; improving transitions and care coordination at the interfaces between care settings; and enhancing coaching, education, and support for self-management. Focusing on both the “senders” and the “receivers” of patients transitioning from the acute care setting has emerged as an important priority. IHI considers the execution of an effective transition from the hospital to post-acute care settings to be a high-leverage initiative, or one likely to be associated with significant improvement in outcomes, for reducing rehospitalizations. The current initiative aims to create an ideal transition home (using the term broadly to include skilled nursing or assisted living facilities, as well as residential dwellings) as a means to reduce avoidable rehospitalizations and improve patient care.

This section concludes with a case study illustrating the profound effects of ineffective transitions in care and rehospitalization on patients and their families.

Patient Case Study: James

James, a 68-year-old man, lives at home with Martha, his wife of 48 years. He was admitted to the hospital with shortness of breath and diagnosed with pneumonia and underlying onset of heart failure. He and Martha were provided with instructions about new medications and diet before discharge and asked to see his physician in the office in two weeks. A few days after returning home, Martha reminded James to schedule his visit to the physician's office, but James had difficulty reaching the scheduler. Finally, he was able to set up a visit for three weeks later.

James didn't mention to Martha that he took the three-day supply of Lasix the hospital sent home with him but never filled his prescription; he felt well again and thought the expense unnecessary. When he noticed swelling in his legs, he didn't want to bother the "busy doctor" and dreaded the ordeal of calling the office again.

After 11 days, James was readmitted to the hospital with increased shortness of breath, marked edema of his lower legs, a weight gain of 25 pounds, and mildly elevated brain natriuretic peptide (BNP), a marker of cardiac insufficiency. His hospital stay went well, but James' stress level was high, his blood pressure was elevated, and another drug was added to his medication regimen.

While James was in the hospital, Martha was admitted for an emergent surgery. After his discharge, James began eating in fast food restaurants as he worried about his wife, juggled visits to Martha's bedside, and managed a roofing project on their home. The day Martha came home from the hospital, James was readmitted with exacerbation of heart failure.

- **Section One** highlights four key changes to create of an ideal transition home and specifies changes that can be tested. Key references and links to resources are included.
- **Section Two** outlines a practical step-by-step sequence of activities to assist staff in testing and adapting many of the proposed changes described in Section One.
- **Section Three** includes a bibliography, annotated list of resources, and worksheets.
- **Section Four** includes case studies of two hospitals that implemented many of the key changes highlighted in this guide.

Section One

This section highlights **four key changes** to create an ideal transition home and specifies changes that can be tested. Key references and links to resources are included.

Creating an Ideal Transition Home

I. Perform Enhanced Admission Assessment for Post-Hospital Needs

- A. Include family caregivers and community providers as full partners in completing standardized assessments, planning discharge, and predicting home-going needs.
- B. Reconcile medications upon admission.
- C. Initiate a standard plan of care based on the results of the assessment.

II. Provide Effective Teaching and Enhanced Learning

- A. Identify all learners on admission.
- B. Customize the patient education process for patients, family caregivers, and providers in community settings.
- C. Use “Teach Back” daily in the hospital and during follow-up phone calls to assess the patient’s and family caregivers’ understanding of discharge instructions and ability to perform self-care.

III. Conduct Real-Time Patient and Family-Centered Handoff Communication

- A. Reconcile medications at discharge.
- B. Provide customized, real-time critical information to the next care provider(s).

IV. Ensure Post-Hospital Care Follow-Up

- A. High-risk patients: Prior to discharge, schedule a face-to-face follow-up visit (home care visit, care coordination visit, or physician office visit) to occur within 48 hours after discharge.
- B. Moderate-risk patients: Prior to discharge, schedule a follow-up phone call within 48 hours and schedule a physician office visit within five days.

I. Perform Enhanced Admission Assessment for Post-Hospital Needs

Accurate and insightful assessment on admission of a patient's individualized needs contributes to a timely diagnosis and individualized treatment plan. The assessment also helps the patient and family caregivers effectively plan for the patient's discharge needs. This early assessment can help to ensure a safe transition home.

Typical failures associated with patient assessment include the following:

- Failure to actively include the patient and family caregivers in assessing needs, identifying resources, and planning for discharge, leading to poor understanding of the patient's capacity to manage in the home environment;
- Unrealistic optimism of patient and family to manage at home;
- Failure to recognize worsening clinical status in the hospital;
- Lack of understanding of the patient's functional ability and physical and cognitive health status, which results in transfer to a care venue that does not meet the patient's needs;
- Not addressing the whole patient (e.g., focusing on one condition, missing underlying depression, etc.);
- No advance directive or planning beyond DNR status;
- Medication errors; and
- Use of multiple drugs, exceeding the patient's ability to manage.

Recommended Changes

I. A. Include family caregivers and community providers as full partners in completing standardized assessments, planning discharge, and predicting home-going needs.

"Family" is defined by the patient and includes any individual(s) who provide support. "Family caregivers" is the phrase used in this text to represent those family members who are directly involved in care of the patient outside hospital or other community institutions.

When formulating the discharge and transportation plan, the inpatient care team should involve clinicians in the community (e.g., home health nurses, primary care and specialty physicians, clinic nurses, skilled nursing facility staff, and long-term care staff) and family caregivers who will play a critical role in the execution of the care plan following the transfer. Recommended processes include the following:

- Identify the appropriate family caregivers or other providers of care to assist with assessment. Family members can provide insight into the home setting that is crucial to a successful discharge of the patient back to the home or to a long-term care facility. Remember that visitors to the hospital are not necessarily the persons who best understand the limitations of the home environment or issues of transferring to another care setting, or who will be helping the patient with self-care at home.^{4,5}
- When assessing patients on admission, use a standardized assessment for predicting discharge basic needs and incorporate changes in the patient's plan of care.⁶ The standard areas of assessment should include the following:
 - Cognitive and psychological status;
 - Current functional status;
 - Cultural values;
 - Medications and special diets;
 - The format in which patient and family caregivers learn best (e.g., written material, verbal discussion, video);
 - Access to social and financial resources; and
 - Ability to perform self-care and monitor health status at home or in the community setting as needed (e.g., body weight, electrolytes, and renal function).
- Connect with community providers (e.g., home care or palliative care nurses, the office practice, SNF or long-term care) who know the patient to gather additional patient assessment information.
- If patients are rehospitalized within 30 days of discharge, ask these questions of the patients and family members to discover opportunities for improvement:^{6,7}

How do you think you became sick enough to be readmitted to the hospital?
Did you see a physician in his/her office before you came back to the hospital?
If yes, which physician did you see?
If not, why not? Describe any difficulties scheduling or getting to that visit.
Has anything (e.g., appointments) 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.

I. B. Reconcile medications upon admission.

In a follow-up study, one of every five hospitalized patients experienced adverse events due to inadequate medical care after leaving the hospital and returning home. Prescription drugs accounted for the most injuries after discharge, affecting 66 percent of the 400 patients involved in the study. According to the researchers, one-third of the post-discharge events could have been avoided and another third could have been less severe if patients had received proper medical care. Adverse events ranged from unnoticed abnormal laboratory results to consequences resulting in permanent disability. More than half of the patients (64 percent) had symptoms for several days, while three percent of patients suffered permanent disabilities.^{8, 9}

- When taking patients' medication history, involve the patient, family caregivers, the clinical care provider and/or primary care physician, and, if possible, pharmacists from the patient's local pharmacy, to ensure the history is complete and accurate on admission.
 - Use the patient's own medication list as a source of information. If necessary, ask the family to bring all medications from home to assist with reconciliation.
 - Interview the patient or family members to determine if patient is taking the medications as listed on the bottles, in physician office records, and on the medication lists. Ensure that over-the-counter and alternative or herbal medicines are included. Ask directly if the patient is taking any medications that are not listed.
- All medication should be reconciled on admission by a suitably trained professional and a record of the reconciliation should be part of the medical record.¹⁰

I. C. Initiate a standard plan of care based on the results of the assessment.

On the day of admission, initiate a standardized plan of care based on the admission assessment. In its 2003 report, "Priority Areas for National Action," the Institute of Medicine (IOM) recommended that providers communicate and reinforce patients' active and central role in managing their illness.^{11, 12} The person designated to be accountable for the effective discharge of the patient (e.g., the patient's primary nurse, a case manager, a discharge planner, a discharge coach, or a hospitalist) should initiate the patient's plan of care based on the enhanced assessment.¹³

- On a whiteboard in the patient's room, list patient and family expectations, the discharge date, daily care plans, and the plan to enable the transition out of the hospital.
- If a referral for home care, advanced practice nurse, or transitions coach is under consideration, begin communication with the agency early for effective transition assessment.^{14,15}
- Discuss preparations for discharge in daily and multidisciplinary rounds. Re-evaluate the estimated discharge date daily and adjust the plan of care. Use the following questions to guide the evaluation:

*Where will the patient likely go after discharge?
Who will be providing the care — is this level of care likely to be adequate or does the patient require a higher intensity of care?
What are the patient's needs after discharge?
What are the potential discharge barriers?*

- Assess the care capacity of the home environment through discussions with patient and family members. Is there a willing, available, mentally competent family caregiver where and when needed?
- If the patient is to be discharged to an assisted living facility, assess whether the facility's nurse is engaged and ready to participate in care as needed.
- Use standard transfer and discharge-readiness criteria for patients with specific conditions.
<http://www.caretransitions.org/documents/checklist.pdf>

II. Provide Effective Teaching and Enhanced Learning

The 2007 MedPAC Report notes that patient adherence with discharge instructions affects the rate of rehospitalization.¹⁶ However, the ability of patients to follow instructions provided at discharge is hindered by the complexities of medical issues, jargon used in the health care setting, and the stress associated with hospitalization. The stress associated with the illness itself is exacerbated by fears about potential diagnoses or treatments, the frustration of navigating health care processes and facilities, and hesitation to ask questions of caregivers.¹⁷

In its 2003 report, "Priority Areas for National Action," the Institute of Medicine (IOM) identified 20 priorities for improving health care quality and disease prevention.¹¹ Care coordination and self-management/health literacy are two of these priorities. Critical elements of the IOM recommendations for improvement also include ensuring maximal sharing of knowledge between clinicians and patients and their families, as the "systematic provision of education and

supportive interventions to increase patients' skills and confidence in managing their health problems.”

Effectively teaching patients about their conditions, medications, and care processes requires careful design and use of verbal and written materials. Universal principles for health literacy specify the use of reader-friendly written materials, which include simple words (one to two syllables), font size of 14 points, short sentences (four to six words), short paragraphs (two to three sentences), no medical jargon, consistent language, and abundant white space.⁶ Verbal redesign includes focusing on what the patient needs to know, delivering knowledge in easy-to-understand formats, and checking patient understanding.

Typical failures found in patient and family caregiver education include the following:

- Assuming that the patient is the key learner;
- Providing written discharge instructions that are confusing, contradictory to other instructions, or not tailored to a patient's level of health literacy or current health status;
- Failure to ask clarifying questions about instructions and plan of care; and
- Non-adherence of patients regarding self-care, diet, medications, therapies, daily weights, follow-up, and testing, due to patient and family caregiver confusion.

Recommended Changes

II. A. Identify all learners (e.g., the patient, family caregivers, and staff from skilled nursing or assisted living facilities) on admission.

Identify the appropriate family caregivers who will assist the patient with self-care after discharge. Visitors to the hospital are not necessarily the persons who will be helping the patient with self-care at home. Be sure that the right learners are involved in all critical self-care education.

II. B. Customize the patient education process for patients, family caregivers, and providers in community settings.

- On admission, ask about how the patient and family caregivers learn best. Provide as many educational resource alternatives as possible, including written material, videos, audio recordings, face-to-face discussions, and interpretive services.¹⁸

- Facilitate patient teaching using the following guidelines:
 - Use plain language, breaking content into smaller, easy-to-learn parts.
Plain Language Association International: www.plainlanguage.org
Clear Language Group: www.clearlanguagegroup.com
 - Slow down when speaking to the patient and family, and break messages into short statements. Use easy-to-learn segments of critical information to help patients and family caregivers master the learning more easily.
 - If written materials are used, highlight or circle key information.
 - “Ask Me 3” is another useful patient communication and education tool that helps staff to teach patients 1) what the main problem is, 2) what the patient should do for that problem, and 3) why the action is important. Ask Me 3 also encourages patients to advocate to get this information about their care.¹⁹

II. C. Use “Teach Back” daily in the hospital and during follow-up phone calls to assess the patient’s and family caregivers’ understanding of discharge instructions and ability to perform self-care.

Teach Back involves asking the patient or family caregiver to recall and restate in their own words what they thought they heard during education or other instructions. According to the published literature, the practice of asking patients to recall and restate what they have been told is one of the 11 top patient safety practices.²⁰ “Return demonstration” or “show back” is another form of “closing the loop” where the patient is asked to demonstrate to the caregiver how he or she will do what was taught. This technique is used routinely in diabetic education and physical therapy.

- Use Teach Back to close gaps in understanding between health care providers and the patient and family caregivers. (See PDSA Worksheet E in Section 2, page 42.)
 - Explain needed information to the patient or family caregiver and then ask in a non-shaming way for the individual to explain in his or her own words what was understood.
 - If a gap in understanding is identified, offer additional teaching or explanation followed by a second request for Teach Back.
 - Assess the patient’s ability and confidence to perform intended self-care, including use of medications; diet; nutrition; symptom awareness and

management; tobacco and alcohol use; activity; and reasons to call the physician (e.g., pain, weight gain, difficulty breathing, or exhaustion).^{6,21}

- Use multiple opportunities while the patient is in the hospital for review of important information to increase patient and family recall and confidence.
- Check for understanding using Teach Back after each segment or portion of the information. For example, conduct Teach Back after telling the patient how to take his/her “water pill” and again after explaining the reasons to call the doctor.
- Use Teach Back or return demonstration to assess the patient’s ability to fill prescriptions and adhere to medications. Remember that non-adherence to a medication regimen may be driven by literacy skills and lack of resources to purchase medications and secure transportation.²²
- Before discharge, provide office practices and skilled nursing facilities with a copy of patient education packet along with the standardized inter-agency transfer forms and plan of care.

III. Conduct Real-Time Patient and Family-Centered Handoff Communications

Clinicians across the health care continuum often provide care without the benefit of having complete information about the patient’s condition, medical history, services provided in other settings, or medications prescribed by other clinicians.⁶ Inadequate transfer of information (the “handoff”) during care transitions plays a significant role in the problems of quality and safety for patients, contributing to duplication of tests and greater use of acute care services.²³

The practitioners receiving the patient need a complete view of the patient’s functional status to effectively assume management of the patient. When appropriate medications are prescribed on discharge from the hospital, the chance of long-term adherence is significantly greater and associated with reduced mortality.^{24, 25}

Typical failures in handoff communication include the following:

- Poor hospital care (evidence-based care missing or incomplete);
- Medication discrepancies;
- Discharge plan not communicated in a timely fashion or does not adequately convey important anticipated next steps;

- Poor communication of the care plan to the nursing home team, home health care team, primary care physician, or family caregiver;
- Current and baseline functional status of patient not described, making it difficult to assess progress and prognosis;
- Discharge instructions missing, inadequate, incomplete, or illegible;
- Patient returning home without essential equipment (e.g., scale, supplemental oxygen, or equipment used to suction respiratory secretions);
- Care processes unraveling as the patient leaves the hospital (e.g., poorly understood cognition issues emerge and the patient is no longer able to manage medications or the family caregiver is no longer available); and
- Lack of appreciation for weakness of patient's social support.

Recommended Changes

III. A. Reconcile medications at discharge.

The process of medication reconciliation upon discharge complements the process of medication reconciliation upon admission, already recommended (see Section One, I. B.), although key differences between the two processes exist. All medications should be reconciled on discharge by a suitably trained professional, and a detailed record should be part of the handoff report to the next caregivers.

- Review the patient's pre-hospital and hospital medication regimen.
 - Consider additional information that was not evident at the time of admission.
 - Clarify whether medications that have been withheld should be restarted after discharge or not.
 - Convert hospital intravenous medications to oral medications.
 - Reconcile substitutions from the institution's formulary and translate back to the original preparations to avoid duplication, medication errors, or unnecessary expense to the patient.
- On discharge, provide patients and caregivers a clear, updated, reconciled medication list. Provide clearly stated instructions for how the patient should take the medications. Communicate clearly about the following:
 - The name of each medication and the reason for taking it;
 - Pre-hospital medications that the patient should discontinue;
 - Changes in the dose or frequency compared with pre-hospital instructions;

- Pre-hospital medications that are to be continued with the same instructions; and
 - Medications and over-the-counter medications that should not be taken.
- Encourage patients and families to use a tool or document that does not require reliance on memory, such as a personalized medication list. Educate patients and family members about the tool's use and importance.²⁶
- Plan ahead to keep the patient safe and comfortable on the trip home. Consider the amount of pain medication required to keep the patient comfortable. Investigate whether needed prescriptions can be filled before the drive home.

III. B. Provide customized, real-time critical information to the next care provider(s).

When a patient is transitioned out of acute care into other care settings, all providers and caregivers (e.g., physicians, nurse practitioners, or physician assistants, SNF caregivers, and family members) on the receiving care team need timely, clear, and complete information about the patient. Practitioners need an understanding of the patient's baseline functional status, active medical and behavioral health problems, medication regimen, goals, family or support resources, durable medical equipment needs, and ability and confidence for self-care. Without this critical information, providers may duplicate services, overlook important aspects of the care plan, or convey conflicting information to the patient and informal caregiver.^{23, 27, 28, 29}

If the patient is transitioning home:

- Provide the patient and his or her family caregiver with written information about what to expect once he or she returns home, easy-to-read self-care instructions, a medication card listing current medications, a list of reasons to call for help, and telephone numbers to call for emergent needs and non-emergent questions.
- Identify the appropriate care providers (e.g., physicians, home care clinicians, and other care providers) and transmit critical information to them at the time of discharge. Ideally, the transmission of critical information precedes or, at a minimum, accompanies the patient to next care location.
- Ensure that the plan of care and transmitted information adequately delineates the patient's status at handoff and the related recommendations for the ongoing plan of care, including:
 - Ability to teach back self-care instructions or medication instructions;

- Ability to perform critical self-care (e.g., wound care, daily weighing, or administration of insulin);
 - Ability to maintain a restricted diet;
 - Ability to take or administer medications;
 - Ability to adhere to medications;
 - Access to transportation, food, medications, and co-pay for medications; and
 - Referrals for services, including an understanding of what to expect, when to call, and whom to call with questions.
- Speak with the individual listed as the patient's emergency contact on the discharge instructions before or immediately after discharge and provide critical information for the patient's safety.

If the patient is transitioning to a community facility:

- Alert the next care providers to the patient's admission and discharge readiness and needs post-discharge. For example, one home care agency provides a hospital-based liaison to assist physicians in daily patient reviews to determine qualification for home care. Another hospital notifies its physicians via a daily inpatient list whenever their patients are admitted to a community facility.

IV. Ensure Post-Hospital Care Follow-Up

Mounting evidence indicates that a few simple steps can offer greater support to patients and their families and reduce rehospitalizations. For example, McAlister and colleagues found in a systematic review of randomized trials of patients with heart failure that specialized follow-up by a multidisciplinary team helped to reduce mortality, hospitalizations due to heart failure, and all-cause hospitalizations. Strategies that included telephone contact to encourage patients to attend their primary care visit in the event of deterioration reduced hospitalizations due to heart failure, but not mortality. In 15 of 18 trials that evaluated cost, multidisciplinary strategies resulted in cost saving.^{30, 31}

Use a careful assessment of a patient's risk of unplanned rehospitalization to determine the timing and type of follow-up visit required. Although a number of risk-assessment tools are

reported in the literature, their use in the complex acute care environment may lead to unreliable application. The chart below lists simple criteria to assess the patient's risk for rehospitalization.

High-Risk Patients	Moderate-Risk Patients
<ul style="list-style-type: none">• Patient has been admitted two or more times in the past year.• Patient is unable to teach back, or the patient or family caregiver has a low degree of confidence to carry out self-care at home.	<ul style="list-style-type: none">• Patient has been admitted once in the past year.• Patient or family caregiver has moderate degree of confidence to carry out self-care at home.

Scheduling follow-up physician office visits before the patient leaves the hospital has been shown to decrease the likelihood of unplanned rehospitalizations. Teams have succeeded in successfully scheduling appointments by partnering with physician office practices and arranging a simplified process for scheduling and ensuring that transportation is arranged for the visit.

Typical failures following discharge from the hospital include the following:

- Medication errors;
- Discharge instructions that are confusing, contradictory to other instructions, or not tailored to a patient's level of health literacy;
- Lack of scheduled follow-up appointment with appropriate care providers, including specialists;
- Follow-up visit too long after hospitalization;
- Follow-up visit made the sole responsibility of the patient;
- Inability of patient to keep follow-up appointments because of illness or transportation issues;
- Lack of an emergency plan with number the patient should call first;
- Multiple care providers, resulting in patient confusion about which provider is in charge;
- Lack of patient social support; and
- Patient lack of adherence to self-care activities (e.g., medications, therapies, daily weighing, or wound care) because of confusion about needed care, availability of transportation, method for scheduling appointments, or how to access or pay for medications.

Recommended Changes

IV. A. High-risk patients: Prior to discharge, schedule a face-to-face follow-up visit (home care visit, care coordination visit, or physician office visit) to occur within 48 hours after discharge.

- Schedule follow-up physician office visits before the patient leaves the hospital. Teams have succeeded in successfully scheduling appointments before discharge by partnering with physician office practices and arranging a simplified process for scheduling and verifying that transportation is arranged for the visit.
- Schedule the consult, home, or office visit to occur within 48 hours after discharge and clarify with the patient and family that transportation is arranged for office visits.
 - If a home care visit is scheduled in the first 48 hours, an office visit must also be scheduled within the first 3-5 days.
- Consult with the patient's physician to identify whether an office visit, care coordination, visit or home care is the best option for the patient.
 - Care coordination visits by a home care nurse can assess the ability of the patient to manage self-care at home, assess the need for additional social support, check that needed supplies and devices are available, review the medication list, and use Teach Back to check patient understanding of the reasons to call the physician and whom to call.
 - A palliative care referral may be useful for patients in advanced stages of illness.

IV. B. Moderate-risk patients: Prior to discharge, schedule follow-up phone call within 48 hours and schedule a physician office visit within 5 days.

- Schedule and conduct follow-up phone calls for moderate-risk patients within 24 to 48 hours after discharge.
 - Calls can be conducted by various caregivers such as Advanced Practice Nurses, staff at a call center, a case manager, or the nurse who cared for the patient while in the hospital.
 - During the calls, verify (using Teach Back) that:

- The patient recalls why, when, and how to recognize worsening symptoms and when and whom to call for help;
 - The patient will keep the physician appointment; and
 - The patient understands how and when to take medications and other critical elements of self care.
- Schedule an office visit within 3 to 5 days and verify with the patient and family that transportation is arranged for the appointment.

Section Two

This section offers seven simple steps to help teams create an ideal transition home for patients who have been hospitalized: 1) form a team, 2) identify opportunities for improvement, 3) develop a clear aim statement to create an ideal transition home for patients, 4) design and test standard work for the key changes, 5) identify and mitigate failures or problems and redesign process, 6) display measures over time to assess progress, and 7) implement and spread the reliable design of processes.

Step 1. Form a Team

Form a multi-stakeholder team with representatives from across the care continuum along with patients and family members. This team will provide oversight for projects aimed at creating an ideal transition home or to a skilled nursing facility. By understanding mutual interdependencies and identifying internal customers and suppliers for every process of the patient journey across the care continuum, the team will shape the redesigned process. Together, team members will explore the ideal flow of information as the patient moves from one setting to the next and learn how to improve transition handoffs.

Consider choosing team members from the following:

Patients and Family Members

Hospital Staff

- Staff Nurses
- Nurse Manager
- Nurse Educators
- Pharmacist
- Hospital Physicians or Hospitalists
- Case Managers
- Quality Improvement Leaders

Staff from Skilled Nursing Facilities

- Nursing Leaders
- Physician Leaders

Clinicians and Staff from Office Practice Settings

- Primary Care Physicians
- Specialists

Nurses or Nurse Practitioners

Practice Administrators

Staff from Community or Public Health Services

Case Managers

Home Care Nurses

Designate a team leader. Convene the first team meeting. At that meeting, make sure to complete the following steps in information exchange:

1. Describe each individual's scope of services and limitations of services.
2. Delineate which information is required for ideal transition of a patient as he/she moves from one setting to the next and how staff at each setting can accurately and timely exchange information with staff at other settings.
3. Talk specifically about whether and how the information exchanged is useful and actionable. Identify any gaps in information exchanges.
4. Assess whether criteria for transition, discharge, and admission have been established and whether they are used prior to transitions.
5. Discuss whether or not the information communicated about patients helps the next care setting understand the patient's condition.
6. Describe the actions staff at each care setting currently take that are particularly helpful for the receiving staff at the next setting.
7. Generate ideas to improve transition processes and reduce the likelihood of rehospitalization.

The team should meet regularly to plan the improvement work and assess progress toward the goal of creating an ideal transition home. In the beginning and at regular intervals, the team members should ask how well they understand and are meeting each other's needs. Refer to **Worksheet A**, "Walking in Each Other's Shoes," as a guide. Make sure everyone who works in discharge and transitions in care understands how the work they do fits into the system of care and serves their customers, including patients, family caregivers, and caregivers at the next setting of care.

"How to Improve: Forming the Team."

<http://www.ihl.org/IHI/Topics/Improvement/ImprovementMethods/HowToImprove/formingtheteam.htm>.

Institute for Family-Centered Care. <http://www.familycenteredcare.org/>.

Additionally, use more than one team to improve different processes in transition in care. Several teams working simultaneously on key processes will accelerate the pace of improvement. For example, one group could work on reliably instituting Teach Back prior to discharge with the family and patient, while another team could work on improving the exchange of information in handoffs to staff in skilled nursing facilities. For best results, the team leader should oversee the entire project, coordinating the work of sub-groups, collecting outcome data, and analyzing progress.

Finally, engage senior executives within the system to assist the team in overcoming barriers. In order for staff to improve transitions in care, management and leadership provide support. The following table lists structures that will support and facilitate the work of the improvement teams in each care setting (e.g., medical and surgical units in hospitals, office practices, and skilled nursing facilities) to development safer, more reliable care transitions and reduce potentially avoidable rehospitalizations.

Structures for Enabling the Work of Improvement Teams in Various Care Settings
<p>Cross-continuum Team:</p> <ul style="list-style-type: none"> • Design patient-friendly patient teaching materials to facilitate patients' understanding of home-going needs for common clinical conditions; use the materials in all care settings. • Provide staff in all settings with training on integrating health literacy principles into discharge teaching, collaborative care planning, and self-management support. <ul style="list-style-type: none"> • Develop staff capabilities in verbal patient teaching, including use of Teach Back, Ask Me 3, and universal communication principles. • Create standard criteria to determine next care setting, readiness for discharge, and transition. • Make site visits to other care settings to understand provider and staff needs throughout the care continuum. • Develop a forum for problem solving to address issues with transitions or revise transition criteria.
<p>Medical and Surgical Units in Hospitals:</p> <ul style="list-style-type: none"> • Establish daily multidisciplinary rounds that include the patient, family members, and representatives from community facilities or office practice to discuss the patient's clinical status, care needs, and discharge plans. • Proactively develop standard methods of communications with office practice staff to reliably send real-time clinical information about patients at the time of discharge and facilitate ease of scheduling appointments prior to patient discharge.
<p>Office Practice Settings:</p> <ul style="list-style-type: none"> • Establish timely appointment availability for patients discharged from the hospital. • Use a pre-determined process to decide which provider is in charge following a hospitalization. • Establish standard methods for communicating with staff and providers at hospital(s) and home care agencies. • Build service agreements between primary care and specialists to coordinate care and smooth communication.
<p>Skilled Nursing Facilities:</p> <ul style="list-style-type: none"> • Provide the transferring hospital with standardized inter-agency transfer forms. • Identify hospital staff who will be informed about problems with a transition to focus improvement efforts.

Step 2. Identify Opportunities for Improvement

2a. Perform an in-depth review of the last five rehospitalizations to identify opportunities for improvement.

- 1) Conduct chart reviews of the last five rehospitalizations, transcribing key information onto the data collection sheet (see **Worksheet B**).
- 2) During hospitalization, conduct interviews with patients recently rehospitalized and their family members. Alternatively, call the patients recently discharged after a rehospitalization and transcribe information onto the data collection sheet (see **Worksheet C**). If possible, interview the same patients whose charts were reviewed (Step 1).
- 3) Conduct interviews with clinicians in the community who know the rehospitalized patient (physicians, nurses in the skilled nursing facility, home care nurse, etc.) to identify problem areas (see **Worksheet C**).

2b. Evaluate the effectiveness of the current discharge teaching process (with patients who are currently hospitalized) to check patient understanding of self-care (see **Worksheet D**).

2c. Review patient satisfaction data regarding communications and discharge preparations to identify opportunities for improvement.

Evaluate trends in the scores of the discharge preparation questions on your patient satisfaction survey for the last year. Assess scores both for the hospital and each medical and surgical unit, when possible. Use the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) or tailored hospital survey questions, if equivalent. Refer to www.hcahpsonline.org for the complete list of HCAHPS questions.

Survey questions:

When you left the hospital . . .

- *During this hospital stay, did doctors, nurses, or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?*
- *During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?*

During your hospital stay . . .

- *During this hospital stay, how often did nurses listen carefully to you?*
- *During this hospital stay, how often did nurses explain things in a way you could understand?*

- Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?
- Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?

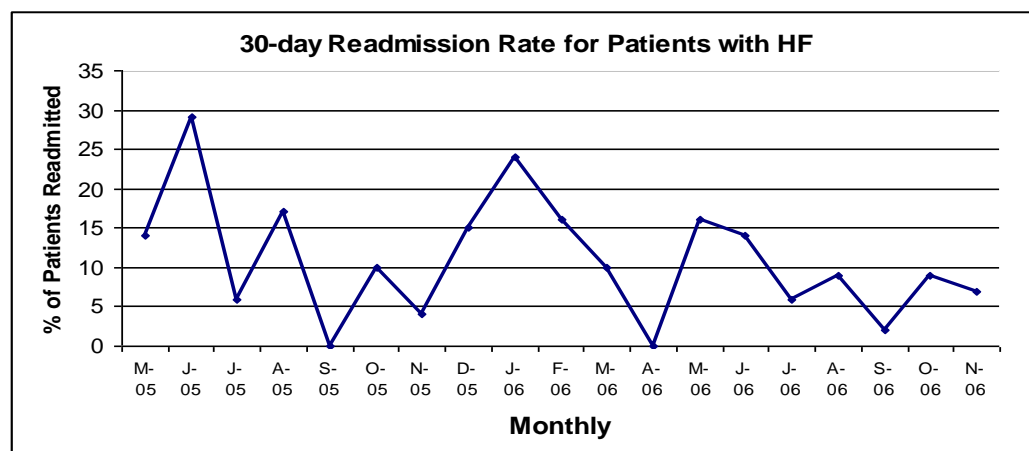
2d. Review 30-day readmission rates to identify opportunities for improvement.

Collect historical data and display monthly rehospitalization rates over time (include at least 12 months of data, preferably more).

Measure Name	Description	Numerator	Denominator
30-Day All-Cause Readmissions	Percent of discharges with readmission for any cause within 30 days	Number of discharges with readmission for any cause within 30 days of discharge Exclusion: planned readmissions (e.g., chemotherapy schedule)	The number of discharges in the measurement month Exclusions: transfers to another acute care hospital, patients who die before discharge
30-Day All-Cause Readmissions for Chronic Conditions such as heart failure and COPD	Percent of discharges with heart failure, COPD, etc., who were readmitted for any cause within 30 days of discharge	Number of discharges with heart failure or other chronic conditions readmitted for any cause within 30 days of discharge Exclusion: planned readmissions (e.g., chemotherapy schedule)	Number of discharges in the measurement period with heart failure or other chronic conditions Exclusions: transfers to another acute care hospital, patients who die before discharge

COPD: chronic obstructive pulmonary disease

HF: heart failure



Step 3. Develop a Clear Aim Statement to Create an Ideal Transition Home for Patients

3a. Report findings from Step 2 to the entire team.

- 1) Chart reviews for patient rehospitalized
- 2) Interviews with patients who have been rehospitalized within 30 days after discharge
- 3) Interviews with “senders” and “receivers”
- 4) Assessment teaching and patient learning
- 5) Trending data of patient satisfaction with discharge preparations (HCAPHS)
- 6) Trending data for 30-day readmission rates

3b. Select a group of patients for initial focus based on information gathered in Step 2.

If a specific diagnosis accounts for 50 percent or more of rehospitalizations or a particular unit accounts for 50 percent or more of rehospitalizations, focus improvements on this diagnosis or unit. If the volume of rehospitalizations is small and no one particular unit accounts for 50% or more of rehospitalizations, focus on reducing all rehospitalizations and improving transitions in care at discharge. For example, teams may want to start their improvement work by focusing on patients with heart failure because these patients frequently experience rehospitalization. Alternatively, a team might begin by focusing on the patients admitted to a particular medical unit. Later, the teams can expand and spread improvements to all hospitalized patients.

3c. Write an aim statement.

Aim statements communicate to all stakeholders the magnitude of change and the time by which the change will happen. Aim statements help teams commit to the improvement work. Develop a clear aim statement for reducing all readmissions. Effective aim statements include five pieces of information:

- What to improve
- Where (specific unit or entire hospital)
- For which patients
- By when (date specific deadline)
- Measurable goal

Sample aim statements:

- 1) *Reduce all unplanned 30-day rehospitalizations of patients with heart failure from 15 percent to 5 percent or less by July 4, 2010.*
- 2) *By December 2010, St. Elsewhere hospital will decrease all 30-day rehospitalizations by 50%.*

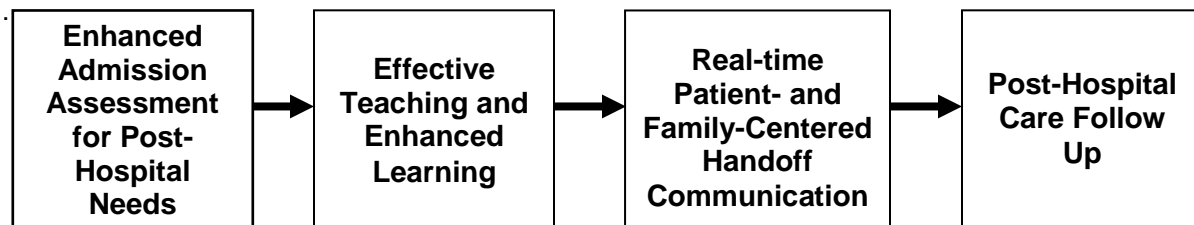
For more on setting aims, see:

<http://www.ihl.org/IHI/Topics/ChronicConditions/AllConditions/HowToImprove/ChronicSettingAims.htm>

Step 4. Design and Test Standard Work for the Key Changes

The four key changes to create an ideal transition home are depicted in the flow chart below.

Ideal Transition Home Flowchart



The table lists some process measure(s) that can help evaluate the successful implementation of each of the key changes.

Key Changes and Associated Process Measures

Key Changes	Process Measures
Enhanced Admission Assessment for Post-Hospital Needs	<ul style="list-style-type: none">Percentage of patients with enhanced admission assessment for post-hospital needs completed within 24 hours of admission
Effective Teaching and Enhanced Learning	<ul style="list-style-type: none">Percentage of patients who can Teach Back two thirds or more of content taught
Real-time Patient- and Family-Centered Handoff Communication	<ul style="list-style-type: none">Percentage of time a written discharge summary is transferred concurrently with the patientPercentage of patients and families who receive a written plan at discharge
Post-Hospital Care Follow Up	<ul style="list-style-type: none">Percentage of patients discharged who had a follow-up visit scheduled before being discharged

Begin designing standard work by focusing on one of the key changes (depicted by the four boxes). Select the key change based on interest and passion of the team or based on the area with the most problems or failures. Each of these key changes is composed of several processes. For example, the process of Teach Back is a component of the key change, Enhanced Teaching and Learning (Section 1, page 11). (Also, see PDSA Worksheet E in Section 2, page 42.)

Select a process such as Teach Back and precisely describe the standard work, including information regarding:

- Who does it;
- When do they do it (and for which patients);
- Where do they do it;
- How do they do it and each tool that is used;
- How often do they do it; and
- Why do they do it.

Ask, “What would I see if I could observe this being done?” Design the work to be flawless, each and every time, regardless of who does it. Use aids and reminders. Design these tools into the system. Use information technology to assist design. For example, if Teach Back is to occur immediately after taking vital signs, an automated reminder could pop up on a screen as a Teach Back reminder, and the information technology system could require documentation of Teach Back to allow inputting of complete vital signs. Make the desired action the default action. For example, design a system such that all patients receive Teach Back twice a day until discharge. Take advantage of work habits and patterns (e.g., at the end of multidisciplinary rounds, the nurse may conduct the second daily Teach Back).

Use small tests of change to refine the design and assess how the standard design actually works. Increase reliability by testing standard work and process design. Make improvements and adapt the process to become more reliable. Whenever the process does not function as designed, ask front-line staff to conduct small tests of change to improve. Remove each problem or failure and adapt changes to improve the reliability of the process. Select tests of change based on ideas from staff and information about process failures. Developing reliable processes may take more than one step. The first goal is that the standard work process is reliably performed at least 80% to 90% of the time. Later, the team can aspire to have the process work 99 even 100 times out of 100.

Suggestions for conducting tests of change:

- Remember that one test of change informs the next.
- Keep tests small; be specific.

- Refine the next test based on learning from the previous one.
- Expand test conditions to determine whether a change will work at different times of day (e.g., day and night shifts, weekends, holidays, when the unit is adequately staffed, in times of staffing challenges).
- Continue the cycle of learning and testing to improve process reliability.
- Collect sufficient data to evaluate whether a test has promise, was successful, or needs adjustment.

For more information on the Model for Improvement and on selecting and testing changes, see <http://www.ihl.org/IHI/Topics/Improvement/ImprovementMethods/HowToImprove/>.

Examples of Small Tests of Change Using Teach Back

- Test 1: One nurse, on one day, tests whether using Teach Back with one patient who has heart failure helps the patient learn the reasons to call the physician for help after discharge (e.g., weight gain, difficulty breathing, or exhaustion). Following Teach Back, the nurse analyzes the percentage of items taught that the patient can teach back.
- Test 2: The same nurse then tests whether a video is more effective than verbal teaching as a learning tool. She or he shows a second patient the video and documents the percentage of signs and symptoms the patient can teach back.
- Test 3: The same nurse offers all patients on one day the choice of learning through personal instruction or video.
- Test 4: The nurse tests whether using Teach Back on every day of the patient's stay increases retention. He or she tests the Teach Back process with one patient on each day of the patient's stay.

Identify problems with the process and test repeatedly until all problems are addressed. Share the knowledge gained in a systematic fashion throughout the hospital and health care system, by sharing with staff, leaders, customers (patients and families), and medical staff members and their office staff. See worksheet x_pg x for instructions on performing a PDSA using Ask Me 3 and Teach Back to check effectiveness of patient teaching. See Step 7 for information on spreading the Teach Back process.

<http://www.ihl.org/IHI/Topics/Improvement/ImprovementMethods/HowToImprove/tipfortestingchanges>
<http://www.ihl.org/IHI/Topics/Improvement/ImprovementMethods/HowToImprove/testingchanges.htm>

Step 5. Identify and Mitigate Failures or Problems and Redesign Process

5 a. Identify process failures.

Refer to process measures in Step 4 that relate to key changes for creating an ideal transition home. Examples of process failures include a discharge for which the next site of care did not receive a timely written discharge summary or the patient and family did not have a written plan at the time of the hand off or discharge. Identify process failures or problems and fix them. For example, an optimal discharge requires early assessment of post-hospital needs. Failure to complete this assessment early in the stay is a process failure. Closely attend to or “swarm” failures as soon after they occur as possible. Seek to understand what caused the problem and why. Consider every problem to be a signal that the process doesn’t work as it should. To improve transitions in care, interview patients and family members, clinicians in the community, the home care agency, or nursing home. Ask about whether a transition could have been better, and, if so, ask about specific ways it could have been better.

When staff members work in a standard process, they will describe the way work gets done in a similar way. For example, interview staff members who regularly use the Teach Back process. Ask them to describe the reliability goal of Teach Back and outline in detail the process used to teach and facilitate learning for patients and family. Each time a staff member’s description varies from the defined standard process, it represents an opportunity for process failure. Listen for words such as “it depends.” Such conditionality indicates ambiguity and possible process variation. It signals the need for additional evaluation for process variation and work toward standardization. Clarify roles, tasks, and processes to improve standardization and reliability. Elicit staff improvement ideas. Use them to conduct additional small tests of change.

5 b. Identify outcome failures.

Readmission to the hospital and patient dissatisfaction with discharge preparations are examples of outcome measures that identify patients at high risk for rehospitalization. Identify failures that contribute to the failure to achieve the desired 30-day readmission rates and results from HCAPHS survey on satisfaction with discharge preparation. After failures are identified and the process redesigned to prevent an outcome failure, standardize it and continue to assess its performance.

Please refer to the On Demand video and IHI's reliability white paper for more information about reliability:

<http://www.ihl.org/IHI/Results/WhitePapers/ImprovingtheReliabilityofHealthCare.htm>

For more information on flowcharts, see

<http://www.ihl.org/IHI/Topics/Improvement/ImprovementMethods/Tools/Flowchart.htm>.

5c. Redesign the process to mitigate the identified failures.

We know that there will be situations when the process is not completed as designed. A reliable process includes a step that ensures that the process is completed as designed at least 80% of the time.³² Correct any failures that put patients at risk immediately upon discovery. For less serious failures in the system, ensure that the process includes a back-up plan; if the first step is not completed as designed, the contingency plan ensures that the step will be completed. For example, on discharge, ask patients if Teach Back was offered. If not, ensure that the discharging nurse completes Teach Back. If Teach Back is not completed two or more times out of 10, examine the causes of the failure and consider redesigning the process. Likewise, the inability of a patient to teach back on an important aspect of self-care indicates a higher risk of rehospitalization. Make sure to include in the transition process the resources to provide additional support for these patients or their family caregivers. Develop ways to signal patient inability to teach back for important self-care concepts and address the knowledge gap prior to discharge.

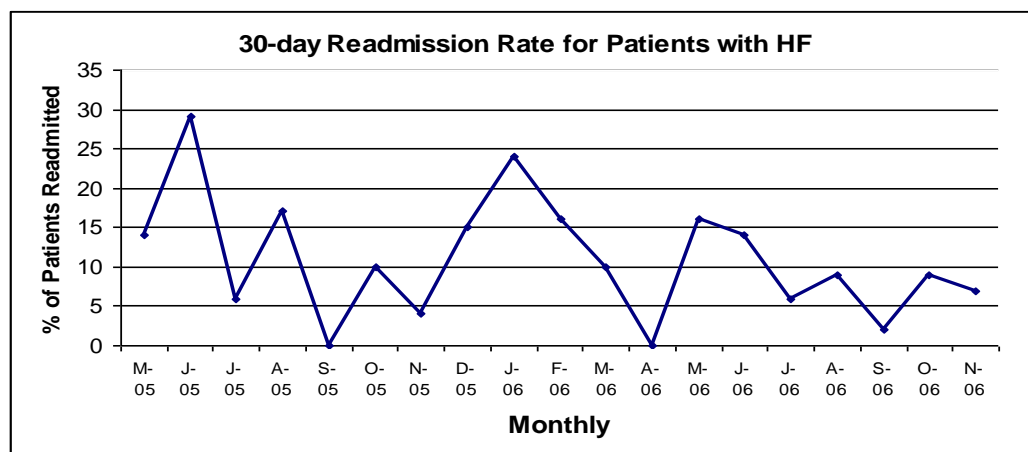
The goal for reliability is to design and refine the ideal transition to the next care setting so that the most important processes work more than 95 times out of 100. This level of reliability requires a way to identify and mitigate failures. It also requires measurement of the reliability of the process to obtain important feedback about the process performance. Achieving this level of reliability requires a full understanding of the location in the process at which defects occur, diligent investigation of the causes of the failure, and robust testing to find changes that result in improvement. Use information technology to assist design. Remember to use aids and reminders, building them into the system whenever possible. Make the desired action the default. For example, build a process in which all patients receive Teach Back twice a day until discharge, ensuring that patients will receive the intervention even if their admission is of short duration. Take advantage of existing work habits and patterns. For example, encourage nurses to conduct Teach Back at the end of multidisciplinary rounds.

Step 6. Display Measures over Time to Assess Progress

Display measures on a run chart. Viewing data over time helps to determine whether or not improvement occurred. Begin with the readmission data. Collect historic readmission data for the past 12 months. Continue to display readmission rates in a line chart during the improvement effort to understand whether and how changes result in improvement. Periodic review after implementation will help determine whether or not gains have been sustained.

Outcome Measures

- Monthly data for 30-day hospital readmissions
- Monthly data for condition-specific 30-day readmissions (e.g., heart failure, COPD)
- Patient satisfaction with discharge preparation



Process Measures

Add relevant measures as you work on each key change. Remember that the goal of all interventions is for the patient to receive the desired intervention or action at least 95% of the time. Annotate the run chart to indicate when specific changes were implemented. (For recommended process measures, see Step 4.)

Share data with unit staff, physicians, and senior leaders. Data reinforces positive change, demonstrates results, and can inspire a group to reach for greater achievement. Reflect on

lessons learned from both successful and unsuccessful tests. Develop the habit of challenging assumptions. Use storytelling as a tool to share lessons learned from the project with staff.³³

Step 7. Implement and Spread the Reliable Design of Processes

7a. Implement reliable design.

Implement the changes that work well under a variety of conditions and are reliable 99 out of 100 times. Learn from each test and refine changes through iterative PDSA cycles.

Implementation requires permanent change. Ensure continued use of the processes by creating new policies and procedures, developing a communication plan, training staff, updating new hire orientation, and continuing to monitor and act on data to maintain gains.

7b. Spread

Successful spread of reliable processes requires that leadership take responsibility for spread and commit sufficient resources to support spread. Leaders must measure and monitor outcomes. Staff at pilot units must educate staff across the organization about the changes they made to improve transitions in care settings through a variety of methods (e.g., communication boards, emails to staff, newsletters, and town hall meetings).

For more information on spread strategy: 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)

Worksheet A: “Walking in Each Other’s Shoes”

How well does the hospital understand your scope of services? _____

How accurate is the handoff information from our hospital to your facility? _____

How timely is the handoff information from our hospital to your facility? _____

How useful is the handoff information from our hospital to your facility? _____

Are transition criteria used in reviewing readiness for transfer? _____

If "No", why not? _____

How effectively communicated is Information critical to understanding patient's
condition? _____

What is the hospital doing now that helps you most with discharged patients? _____

What ideas do you have to improve processes to reduce the likelihood that patients would
return to the hospital unnecessarily? _____

Worksheet B: Chart Reviews of Patients Who Were Readmitted

Chart Review Instructions

The purpose of the chart review is to identify opportunities to reduce unplanned readmissions. 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. The intent is to learn how we might prevent readmissions that we once thought impossible to prevent. Begin with review of five patients.

Chart reviews: (For the questions with yes/no answers, place a tick mark in either the “yes or no” space for each chart reviewed.)

1. Number of days between the last discharge and this readmission date?

Patient #1 _____ #2 _____ #3 _____ #4 _____ #5 _____

2. Was the follow-up physician visit scheduled prior to discharge? Yes_____ No_____

3. If yes, was the patient able to attend the office visit? Yes_____ No_____

4. Were there any urgent clinic/ED visits before readmission? Yes_____ No_____

5. Functional status of the patient on discharge?

Patient #1 _____ Patient #2 _____

Patient #3 _____ Patient #4 _____

Patient #5 _____

6. Was a clear discharge plan documented? Yes_____ No_____

7. Was evidence of “Teach Back” documented? Yes_____ No_____

8. List any documented reason/s for readmission

Patient #1 _____

Patient #2 _____

Patient #3 _____

Patient #4 _____

Patient #5 _____

9. Did any social conditions (transportation, lack of money for medication, lack of housing) contribute to the readmission?

Patient #1 _____ Patient #2 _____

Patient #3 _____ Patient #4 _____

Patient #5 _____

Worksheet B: Chart Reviews of Patients Who Were Readmitted (page 2)

Summarize the Findings from the 5 Chart Reviews:

What did you learn?

What trends or themes emerged?

What, if anything, surprised you?

What new questions do you have?

What are you now curious about?

What do you think you should do next?

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

Worksheet B: Chart Reviews of Patients Who Were Readmitted (page 3)

List of Typical Failures:

Typical failures associated with patient assessment:

- Failure to actively include the patient and family caregivers in identifying needs, resources, and planning for the discharge;
- Unrealistic optimism of patient and family to manage at home;
- Failure to recognize worsening clinical status in the hospital;
- Lack of understanding of the patient's physical and cognitive functional health status may result in a transfer to a care venue that does not meet the patient's needs;
- Not addressing whole patient (underlying depression, etc.);
- No advance directive or planning beyond DNR status;
- Medication errors and adverse drug events; and
- Multiple drugs exceed patient's ability to manage.

Typical failures found in patient and family caregiver education:

- Assuming the patient is the key learner;
- Written discharge instructions that are confusing, contradictory to other instructions, or not tailored to a patient's level of health literacy or current health status;
- Failure to ask clarifying questions on instructions and plan of care; and
- Non-adherent patients (resulting in unplanned readmissions):
 - a. About self-care, diet, medications, therapies, daily weights, follow-up and testing; and
 - b. Caused by patient and family-caregiver confusion.

Typical failures in handoff communication:

- Poor hospital care (evidence-based care missing/incomplete);
- Medication discrepancies;
- Discharge plan not communicated in a timely fashion or adequately conveying important anticipated next steps;
- Poor communication of the care plan to the nursing home team, home health care team, primary care physician, or family caregiver;
- Current and baseline functional status of patient rarely described, making it difficult to assess progress and prognosis;
- Discharge instructions missing, inadequate, incomplete, or illegible;
- Patient returning home without essential equipment (e.g., scale, supplemental oxygen, or equipment used to suction respiratory secretions);
- Having the care provided by the facility unravel as the patient leaves the hospital (e.g., poorly understood cognition issues emerge); and
- Poor understanding that social support is lacking.

Typical failures following discharge from the hospital:

- Medication errors;
- Discharge instructions that are confusing, contradictory to other instructions, or are not tailored to a patient's level of health literacy;
- No follow-up appointment or follow-up needed with additional physician expertise;
- Follow-up too long after hospitalization;
- Follow-up is the responsibility of the patient;
- Inability to keep follow-up appointments because of illness or transportation issues;
- Lack of an emergency plan with number the patient should call first;
- Multiple care providers; patient believes someone is in charge;
- Lack of social support; and
- Patient lack of adherence to self-care, e.g., medications, therapies, daily weights, or wound care because of poor understanding or confusion about needed care, transportation, how to get appointments, or how to access or pay for medications.

Worksheet C: Interviews with Patients, Family Members, and Care Team Members

For the cases in Worksheet A chart reviews, interview the patient and/or family members and care team members to learn more about the reasons for a patient's readmission. Use one copy of this worksheet for each of the five patients.

Ask Patient and/or Family Members:

1. *How do you think you became sick enough to be readmitted to the hospital?*
2. *Was there a physician office visit before return to the hospital?* Yes____ No____
 - *If yes, which physician (PCP or specialist) did you see?*
 - *If not, why not?*
3. *Describe any difficulties you encountered in scheduling or getting to that office visit.*

Has anything (e.g., appointments) gotten in the way of your taking your medicines?
4. *How do you take your medicines and set up your pills each day?*
5. *Describe your typical meals been since you got home.*

Ask Care Team Members: Interview physicians, nurses, or others who know the patient.

What do you think caused this patient to be readmitted to the hospital?

Write a brief descriptive story about the patient's circumstances that contributed to the readmission. See example on pages 6-7.

Worksheet C: Interviews with Patients, Family Members, and Care Team Members (page 2)

Develop an overall summary of all of your reviews and discuss with your multidisciplinary cross-continuum team.

What did you learn? _____

What were the most common failures discovered? _____

What trends or themes emerged? _____

What, if anything, surprised you? _____

What new questions do you have? _____

What are you now curious about? _____

What do you think you should do next? _____

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

Worksheet D: Evaluate Effectiveness of Discharge Teaching Process

Observe standard discharge teaching for 3 to 5 patients currently hospitalized to learn how good our teaching is and how well patients learn. Identify areas for improvement. Note whether and how the teacher assessed and what the patient understood. Was it a yes-or-no question? Was repeat demonstration used? Was the patient asked to share what he/she learned?

For each patient, if you believe the patient understood what was taught, describe how the teacher knew what the patient understood:

Patient #1 _____

Patient #2 _____

Patient #3 _____

Patient #4 _____

Patient #5 _____

What did you learn? _____

What trends or themes emerged? _____

What, if anything, surprised you? _____

What new questions do you have? _____

What are you now curious about? _____

What do you think you should do next? _____

What assumptions about discharge teaching that you held previously are now challenged?

Worksheet E: Check Patient Understanding Using Teach Back

Perform small tests of change to discover the level of patient and family understanding during patient education on self-care. The tests will guide you in the first steps of using Ask Me 3 and Teach Back to redesign patient teaching.

1. **Break down the patient education content into two to four simple, “need to know” teaching points.** For example, the reasons a patient with heart failure should call his or her physician after discharge from hospital include shortness of breath, swelling in the legs, weight gain, and cough.
2. **Use the Ask Me 3 questions to design how to teach the content.** 1) What is my main problem? 2) What should I do for that problem? and 3) Why is that important?
3. **TEACH the patient:** For example, “Mr. Jones, now that you have heart failure, it will be important for you to be aware of your symptoms and call your doctor immediately if the symptoms get worse.” Teach the four reasons to call the physician and explain that not calling the physician may result in readmission to the hospital.
4. **Ask the patient to TEACH BACK the information:** Ask in a non-shaming way for the patient to repeat back what he heard in his own words. For example, “Mr. Jones, I want to be sure that I did a good job of teaching you about when to call the doctor. Please tell me in your own words what you will tell your wife when she comes in later today.” Re-teach to any gaps in understanding and ask for another Teach Back.
5. **ANALYZE your results:** What proportion of the four reasons to call the physician was the patient able to teach back? Use the worksheet to tally your results.

What percentage of patients could teach back at least 75 percent or of the reasons to call the physician? _____

What did you learn? _____

What surprised you? _____

What are you curious about now? _____

As a result of findings, what steps do you plan to take next? _____

Test of Change Data Report

Using Ask Me 3 and Teach Back to Redesign Patient Teaching

PATIENT	TEACHING POINT #1	TEACHING POINT #2	TEACHING POINT #3	TEACHING POINT #4	SCORE 75% or more recall & restate	Comments
	Short of breath	Swelling in legs	Weight gain	Cough		
Example	Yes	Yes	Yes	No	Yes	Couldn't remember cough
Example	Yes	Yes	No	No	No	Patient really tired today
1						
2						
3						
4						
5						
Percent of Patients who could teach back at least 75 percent (3 of 4 teaching points)						

Section Three

This section includes an annotated list of resources:

- I. Resources for Enhanced Admission Assessment for Post-Hospital Needs
- II. Resources for Enhanced Teaching and Learning
- III. Resources for Patient and Family-Centered Handoff Communication
- IV. Resources for Post-Hospital Care Follow-Up
- V. General Resources

I. Enhanced Admission Assessment for Post-Hospital Needs

ThedaCare's "Admission Trio" Process: (MD, RN, and Pharmacist)

At ThedaCare's Appleton Medical Center, a trio consisting of a physician, a registered nurse, and a pharmacist work together to complete the patient assessment on admission. This interdisciplinary collaboration resulted in proactive involvement of registered nurses, physicians, and pharmacists, collaborative learning among members of the care team, and high patient satisfaction ratings with regarding involvement. By reducing "rework," the team was able to decrease the time required for the admission process cycle from a range of 5 to 12 hours to 45 to 90 minutes. Through a number of changes, including access to carts with laptops and supplies, cutting down on the need to leave the room during assessment, reducing the number of assessment items from 288 to 135, eliminating 78 duplicate items, and reducing the locations of assessment documentation from four to one, the trio was able to conduct assessments that were more time efficient and of higher quality.

<http://www.ihl.org/IHI/Topics/MedicalSurgicalCare/MedicalSurgicalCareGeneral/Tools/TCABHowToGuideIncreasingNursesTimeinDirectPatientCare.htm>

"Ticket Home" White Board – Staff in some units have placed a Ticket Home (or Journey Home) white board in each patient's room to capture important information about the patient's progress on specific requirements for leaving the hospital, as well as the preliminary discharge date and time. The team uses the white board as a communication tool for all caregivers and the patient and family. An example is included below and more information is available at <http://www.ihl.org/IHI/Topics/MedicalSurgicalCare/MedicalSurgicalCareGeneral/ImprovementStories/ShesGotaTicketToGoHome.htm>

Discharge Criteria for Patients with Heart Failure

Adams et al. described discharge criteria for patients with heart failure. Criteria for all patients with heart failure and for those with advanced condition or recurrent admissions are available at http://www.heartfailureguideline.org/document/hfsa_2006_comprehensive_heart_failure_guidelines.pdf Accessed September 12, 2007.

II. Enhanced Teaching and Learning

Health literacy Tools

Ask Me 3

Ask Me 3 is a communication tool using three simple but essential questions that patients should ask their providers in every health care interaction. Materials are available from the Partnership for Clear Health Communication, which offers free posters and brochures in English and Spanish. Available at <http://www.npsf.org/askme3/>

Teach Back

The Society of Hospital Medicine BOOST intervention toolkit includes a simple tool for learning to use Teach Back to improve patient understanding – the process of “closing the loop.”

http://www.hospitalmedicine.org/ResourceRoomRedesign/RR_CareTransitions/PDFs/Teach_Back.pdf

Impact of Closing the Loop in Improving Outcomes for Patients with Asthma

Schillinger D, et al. Closing the loop: physician communication with diabetic patients who have low health literacy. *Arch Intern Med* .2003;163:83-90.

Estimates on Incidence of Low Health Literacy

Review your local population data on the incidence of low and basic adult health literacy. Data are available from the National Adult Literacy Survey (NALS) at

<https://www.casas.org/lit/litcode/Search.cfm>.

University of North Carolina at Chapel Hill Simplified Heart Failure Patient Teaching Materials

The patient-friendly teaching materials, “Heart Failure Self-Management – Caring for Your Heart: Living Well with Heart Failure,” include detailed images and clear, low-health literacy appropriate language. Available at www.nchealthliteracy.org under "health communication aids."

Easy-to-Read Written Materials

The health literacy section of the US Health Resources and Services Administration's website contains free and easy-to-read health brochures and information in various languages. Available at <http://www.hrsa.gov/healthliteracy/>.

Clear & Simple: Developing Effective Print Materials for Low Literate Readers. National Cancer Institute. Available at www.cancer.gov/cancerinformation/clearandsimple.

Essential Elements of Patient Education

Adams et al. described the elements of education, skills building, and target behaviors as being essential for achieving the best outcomes for patients with heart failure.

Adams KF, et al. HFSA 2006 Comprehensive Heart Failure Practice Guideline. *Journal of Cardiac Failure*. 2006 Feb;12(1):e59 [Table 8.1].

Patient Education Modules

The Heart Failure Society of America designed modules to help patients learn to live successfully with heart failure. The advice in the modules is designed to help patients feel better, stay out of the hospital, and live longer. Available at http://abouthf.org/education_modules.htm.

Agenda-Setting Communication Cards

This communication tool was designed in the UK in collaboration with patients with diabetes to help empower patients to set the agenda in health care discussions. Each card presents a common issue faced by patients with diabetes (e.g., managing exercise, healthy lifestyle

choices, and monitoring vital measures). The patient selects the cards that represent the issues of highest priority, and uses these cards to guide a discussion with the provider during the subsequent visit. One TCAB hospital has adapted the agenda-setting cards for use with patients with heart failure and is using the cards during discharge communication (see Case Study 2 in section 4). More information on the cards is available at <http://www.design-council.org.uk/en/Case-Studies/All-Case-Studies/RED---Diabetes/>

III. Patient and Family-Centered Handoff Communication

Core Functions for Meeting the Needs of Patients in Transition

HMO Care Management Workgroup's 2004 report, "One Patient, Many Places: Managing Health Care Transitions," includes a framework for ensuring timely and effective handoff communication. It also includes recommendations for both the sending and receiving care teams on how to improve the safety and reliability of transitions out of hospitals.

HMO Care Management Workgroup. *One Patient, Many Places: Managing Care Transitions Across Settings*. Washington, DC: AAHP-HIAA Foundation; February 2004. Available page 7 at <http://www.ahip.org/content/default.aspx?bc=38|65|20356|69|5743>.

IOM "Safe Practices" List of Items for Handoff

The IOM report "Safe Practices for Better Healthcare" (2006) includes a standard list of eight items that should be included in the handoff to the community clinical provider who accepts the patient's care after hospital discharge. Available at http://www.qualityforum.org/publications/reports/safe_practices_2006.asp.

Prevent Adverse Drug Events (Medication Reconciliation) How-to Guide

This How-to Guide, developed as part of IHI's 5 Million Lives Campaign, explains how to prevent adverse drug events (ADEs) by implementing medication reconciliation at all transitions in care: admission, transfer, and discharge. Available at <http://www.ihl.org/nr/rdonlyres/98096387-c903-4252-8276-5bfc181c0c7f/0/adehowtoguide.doc>.

American Society of Hospital Pharmacists' *Medication Reconciliation Toolkit*

This online resource center provides tools, references, recommendations, innovative ideas, and examples of success stories and lessons learned.

http://www.ashp.org/Import/PRACTICEANDPOLICY/PracticeResourceCenters/PatientSafety/ASHPMedicationReconciliationToolkit_1.aspx

Shared Care Plan Tools

Use of shared care plans can help standardize reliable communication between patients and health care professionals and support long-term planned care. See example shared care plan tool available at

<http://www.ihl.org/IHI/Topics/ChronicConditions/Diabetes/Tools/My+Shared+Care+Plan.htm>.

IV. Post-Hospital Care Follow-Up

Patient-Powered Care Plans

Shared Care Plan is a secure web-based, patient-owned tool that lets patients share up-to-date information with their care teams to help manage their chronic conditions and promote the flow of information between the patient and care team members. Whatcom County patient-powered care plans are available at <http://www.Patientpowered.org>.

V. General Resources

Advanced Practice Nurse-Driven Transitional Care

This article describes an advanced practice nurse (APN)-implemented transitional care program. APNs use an evidence-based protocol for care, based on national heart failure guidelines and designed especially for this patient care group and their caregivers.

Naylor MD, et al. Transitional care of older adults hospitalized with heart failure: A randomized, controlled trial. *J Am Geriatr Soc*. 2004 May;52(5):675-684.

The Care Transitions Program:SM Transitions Coach

A “Transitions Coach” assists patients with learning self-management skills and ensures their needs are met during the transition from hospital to home. More information is available at <http://www.caretransitions.org/>.

CTM-3 Patient Interview Tool

The Care Transition Measure (CTM-3) is a tool developed by Dr. Eric Coleman that quantifies the patient and family caregiver experience with discharge procedures in the hospital. The tool also assesses if the patient is at risk for rehospitalization. The Care Transitions Program website is an excellent resource for learning more about patient and family needs during transitions in care. More information is available at <http://www.caretransitions.org>.

Project BOOST: Better Outcomes for Older Adults Through Safe Transitions

The project BOOST section of the Society of Hospital Medicine website includes a care transitions resource, which focuses on essential elements for improving the discharge process. The resource room of the website provides educational resources (e.g., review of key literature, teaching slide sets, and patient education materials), clinical tools, and a refresher on the basic principles of quality improvement. Available at www.hospitalmedicine.org/BOOST.

Section Four

The following case studies describe two hospitals that successfully implemented many of the changes proposed in this guide.

Case Study 1:

St. Luke's Hospital (Cedar Rapids, Iowa) — Senior Affiliate of Iowa Health System

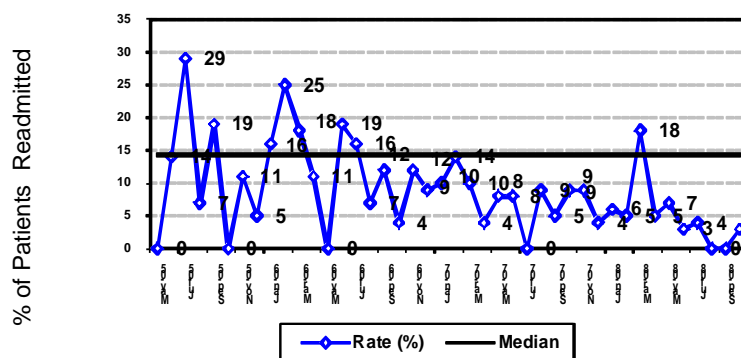
Aim Statement

By January 1, 2009, St. Luke's Hospital's Telemetry Unit and Medical Unit will reduce unplanned readmissions by 50 percent (from 12 percent to less than 4 percent) by improving the transition home process for all patients with heart failure.

Methodology

Include the patient and caregiver, ensuring that they fully understand the diagnosis, plan of care, and follow-up care with the physician.

Results



Readmissions of Patients with Heart Failure within 30 Days as a Percentage of Patients Discharged

Changes Tested and Implemented

During the 10 years prior joining IHI's innovation project on designing the ideal transition home, St. Luke's Hospital nursing units scheduled the follow-up physician office visit for patients with heart failure before discharge. In March 2006, St. Luke's began testing working with TCAB teams on the ideal discharge process, and in August began major tests of change in the discharge process, as described below.

I. Interventions to Enhance Assessment for Post-Discharge Needs

The care unit conducts a Daily Discharge Huddle at 10:00 AM at the patient's bedside with the RN caring for the patient, the charge nurse, and the Case Manager. Daily goals are reviewed and written on the white boards in each room, providing an opportunity to review the plan for the day, anticipate discharge needs, and determine what it will take to get the patient home.

Beginning in November 2006, St. Luke's partnered with its home health care agency (VNA) to provide a post-hospital home assessment visit within 24 to 48 hours after discharge to all patients with heart failure, regardless of whether they qualified for home care. This process has benefited patients through greater support and education, including additional reinforcement and in-home assessment (e.g., medication reconciliation, adherence to self-care regimen, or need for further home care services). VNA visits were tested and implemented for patients within 24 to 48 hours after discharge (goal: 24 hours). During visits, the nurses use Teach Back to verify patient understanding of care instructions. Visits are paid for by the joint effort of the hospital and VNA. Tests of this process change began in November 2006 and were hardwired into the system for all patients with heart failure in January 2007.

In 2008, approximately 51 percent of patients with heart failure discharged to home participated in the complimentary home care visits. Twenty-seven percent of discharged patients with heart failure qualify and are set up on a regular home care visit. Eleven percent of patients with heart failure refuse the home care visits; the team sees fewer refusals when more time is spent in instruction and methods are improved for delivering education. Some patients with heart failure are not offered the intervention, because they are admitted and discharged over the weekend.

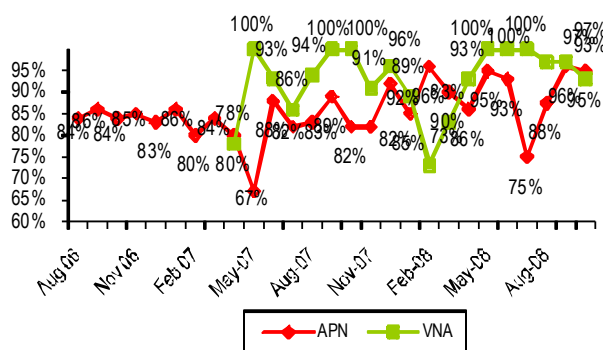
II. Interventions to Improve Effective Teaching and Enhanced Learning

In August 2006, the team revised patient education processes and materials to incorporate health literacy concepts for written materials, Teach Back, and involvement of patients and families. The patient education materials facilitate use of Teach Back in the hospital, home care, and long-term care settings.

- Written materials were redesigned with plain language, use of color, and only "need to know" concepts that patients can understand and recall.
- Teach Back (see Section One, II. C. above), the process of asking patients to recall and restate in their own words what they have been taught, was incorporated at the patient's

bedside, during the 24 to 48 hours post-discharge follow-up visit by the VNA, and in the seven-day post-discharge phone call to the patient by the APN.

- The follow-up phone calls Teach Back study began in August 2006; VNA Teach Back started in March 2007. (See figure.)
- In 2008, the team added yearly nurse competency validation on Health Literacy to include interactive role-playing on providing education to a patient and review of the concepts of Health Literacy and Teach Back methods. Staff is given scenarios to read, and they critique each other in these techniques. Assessment includes the following items:
 - Displays ability to conduct Teach Back in a shame-free way; tone is positive
 - Utilizes plain language for explanations
 - Does not ask patient, “Do you understand?”
 - Uses statements such as, “I want to make sure I explained everything clearly to you. Can you please explain it back to me in your own words?”; “I want to make sure I did a good job explaining this to you, because this can be confusing”; or “Can you tell me what changes we decided to make and how you will take your medication now?”
 - If needed, participant clarifies and reinforces the explanation to improve patient understanding.



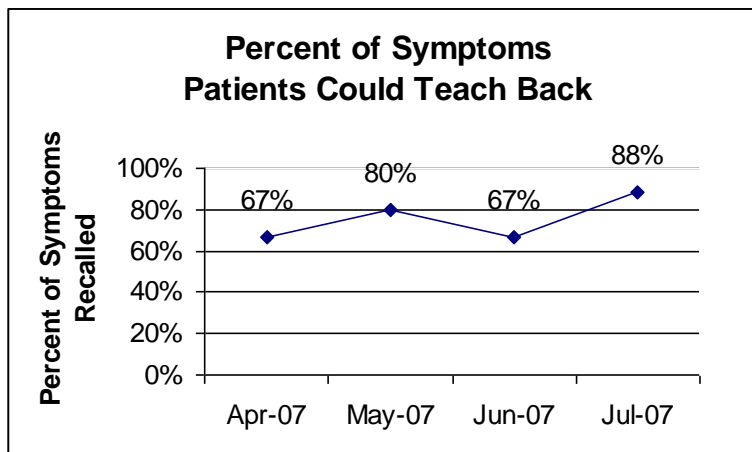
Percent of complete patient responses in Teach Back conducted by VNA at 24 to 48 hours post-discharge home visit and the follow-up phone call by hospital-based advanced practice nurse 7 days after discharge.

Teach Back questions:

- What is the name of your “water pill”?
- What weight gain should you report to your doctor?
- What foods should you avoid?
- Do you know what symptoms to report to your doctor?

Teach Back also is used to identify failures in helping patients understand weight gain and symptoms for which the patient should call the physician. The graph below shows the results of tests of change, specifically, the percent of symptoms to report to the physician

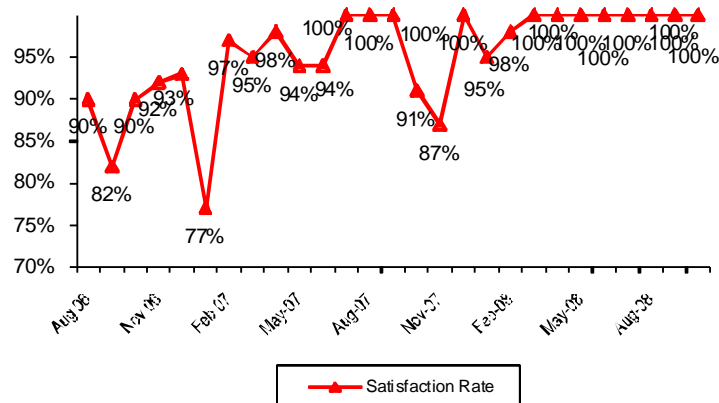
that the patients could recall. Staff assessed the responses of patients who were unable to teach back to improve teaching methods.



- VNA nurses asked patients where the critical information magnet (see page 56) was located in the house, to discover whether patients can quickly find the reminders about when and why they should contact their physician for help and whom to call.
- The team found the most effective presentation of the information for understanding by soliciting feedback from patients and families through focus groups and speaking with participants at the monthly heart failure classes.

To assess patient satisfaction with discharge instructions, the team obtained information during the follow-up phone call made by the APN seven days after discharge. The APN asked, “Do you have any questions about your discharge instructions?” and “Did they meet your needs?” The graph displays the improvement in patient satisfaction with discharge instructions.

Percent of patients satisfied with discharge instructions
(Teach Back study began in August 2006)



Patients with heart failure and their families are given a 12-month calendar at discharge. See example pg 56. The calendar includes information and reminders on maintaining health, a readily available space for logging their weight, and the dates of upcoming classes on heart failure that the patient and family can attend.

The St. Luke's Patient and Family Advisory Council celebrated its one-year anniversary at the end of 2008. The council provides feedback on changes to patient education programs. The council has been instrumental in critiquing education material and ensuring that materials present information in a format that patients and families can understand.

III. Real-Time Patient-Centered Handoff Communication

St. Luke's partnered with the hospital's home care agency (VNA) and two long-term care facilities to standardize and enhance the quality of the handoff communication process.

- Provided education for home care and long-term care RNs and CNAs on HF and continuity processes. CNAs often observe symptoms while spending time with patients.
- The HF Advanced Practice Nurse (APN) and Cardiac Rehabilitation nurse continue to visit other long-term facilities in the community to provide HF education to their staffs.
- Provided the receiving nursing home facilities with the patient education packet and standardized interagency transfer form.
- Established ongoing monitoring of readmissions and other failures in the discharge process to look for opportunities for continued improvement.
- With the assistance of IHI, an observation and case study review of Long Term Care transfer from the hospital was completed. Key learnings include:
 - Joint team meetings with membership should include those closest to the work,
 - Better understanding of each other's work can be achieved through actually going into each other's settings to understand the handoff processes, and
 - Partner to look at ideas to improve transitions medication reconciliation.

The hospital appointed a medical director for heart failure who works closely with the APN and HF team to review care processes and with the medical staff to emphasize utilization of order sets and improved handoffs.

Medication reconciliation: In 2006, the compliance rate was 75% to 88%. By mid-year 2007, the compliance rate increased to 94% and by year-end 2007 to 100%.

In August 2007, review of a readmitted patient helped staff realize the need for referral to Palliative Care for patients with advanced stages of HF. Criteria for referral have continued to be tested. The referrals have increased from less than 5% to over 20% (mid-2007 to end of 2008). A full-time physician, a social worker, and nurses have been added to the program. Discussions between the Palliative Care Medical Director and attending physicians have enhanced their understanding of the program and potential benefits to patient transitions. In late 2008, an ARNP for the outpatient setting was added to the palliative care program in response to many requests for assistance with palliative care discussions for patients in the physician offices.

Scheduling office visits while patients are in the hospital is occurring approximately 80 percent of the time and includes 80 percent to 90 percent of the hospital's HF population. The process was streamlined in the last half of 2008 through providing discussion and data to physician groups, collaborating with the Cardiology Group's Heart Failure Clinic, including the HF Clinic RN on the hospital's transitions team, ongoing handoff interaction between the hospital HF ARNP and the Clinic ARNP, a standing order from the Cardiology Group for follow-up in 3-5 days, and hospitalists writing the 3- to 5-day order for cardiology and PCP follow-up (adherence to this process increased from less than 10% to 50% at the end of 2008). Spread to more PCP offices is planned for 2009.

IV. Post-Hospital Care Follow-Up

Partnership with physician offices resulted in redesign of scheduling HF visits to allow office visits within 3 to 4 days for all HF patients (particularly for high-risk readmission patients). Two internal medicine clinics and a cardiology group are now scheduling the follow-up appointment for all HF patients 3 to 5 days after discharge. The goal for high-risk patients (particularly any patient who has a readmission) is to have an office visit within 3 days; the goal for other patients is to have an office visit within 4 days (current actual is 3 to 5 days).

Advanced Practice Nurse follow-up phone calls on seventh day after patient discharge were added in March 2007. An Advanced Practice Nurse (APN) was added to the continuity program.

Institute for Healthcare Improvement
How-to Guide: Creating an Ideal Transition Home

She sees the patient while in the hospital, calls the patient on the seventh day post-discharge, and uses Teach Back to determine patient or family caregiver understanding of critical self-care instructions. In October 2007 a reminder to use Teach Back was added to standard HF admission and discharge order sets.

St. Luke's Heart Failure Tools

Signs of Heart Failure

If you have one or more of these symptoms:

- Weight gain of 3 pounds in 1 day or
- Weight gain of 5 pounds or more in 1 week
- More shortness of breath
- More swelling of your feet, ankles, legs or stomach
- Feeling more tired – no energy
- Dry, hacking cough
- Harder to breathe when lying down
- Chest pain

Call doctor _____
 at _____



**ST. LUKE'S
HOSPITAL**
IOWA HEALTH SYSTEM

VISITING
NURSE
ASSOCIATION

Critical Information
Refrigerator Magnet

Example of Class Calendar



July 2008

Enjoy a parade and fireworks!

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 		2 My Weight	3 My Weight	4 My Weight	5 My Weight	
6 My Weight	7 My Weight	8 My Weight	9 My Weight	10 My Weight	11 My Weight	12 My Weight
13 My Weight	14 My Weight	15 My Weight	16 My Weight	17 My Weight	18 My Weight	19 My Weight
20 My Weight	21 My Weight	22 My Weight	23 My Weight	24 My Weight	25 My Weight	26 My Weight
27 My Weight	28 My Weight	29 My Weight	30 My Weight	31 My Weight	Do not smoke. Do not chew tobacco	

We appreciate freedom!



At a picnic, choose a hamburger rather than a brat or hot dog.

Stay away from potato chips - too salty!

If it is hot, take a walk in the early morning or at the mall.

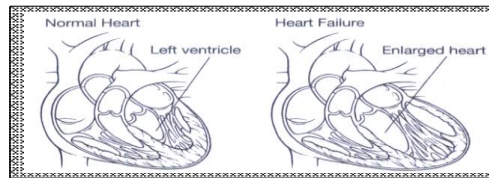
Ask a friend, family member or a pet to join you!



**ST. LUKE'S
HOSPITAL**
IOWA HEALTH SYSTEM
 A better place to be

Heart Failure

Heart failure means your heart is not pumping well. Symptoms of heart failure may develop over weeks or months. Your heart becomes weaker over time and not able to pump the amount of blood your body needs. Over time your heart may enlarge or get bigger.



Your heart

When you have heart failure, it does not mean that your heart has stopped beating. Your heart keeps working, but it can't keep up with what your body needs for blood and oxygen. Your heart is not able to pump as forcefully or as hard as it should to move the blood to all parts of your body. Heart failure can get worse if it is not treated. Do what your doctor tells you to do. Make healthy choices to feel better.

Changes that can happen when you have heart failure

- Blood backs up in your veins
- Your body holds on to extra fluid
- Fluid builds up, causing swelling in feet, ankles, legs or stomach
This build up is called edema
- Fluid builds up in your lungs This is called congestion
- Your body does not get enough blood, food or oxygen

Signs of heart failure

- Shortness of breath
- Weight gain from fluid build up
- Swelling in feet, ankles, legs or stomach
- Feeling more tired. No energy
- Dry hacky cough
- It's harder for you to breathe when lying down

Some causes of heart failure

- Heart attack damage to your heart muscle
- Blockages in the heart's arteries which doesn't let enough blood flow to the heart
- High blood pressure
- Heart valve problems
- Cardiomyopathy
- Infection of the heart or heart valves

Heart Failure Zones

EVERY DAY

Every day:

- Weigh yourself in the morning before breakfast and write it down.
- Take your medicine the way you should.
- Check for swelling in your feet, ankles, legs and stomach
- Eat low salt food
- Balance activity and rest periods

Which Heart Failure Zone are you today? **Green, Yellow or Red**

GREEN ZONE

All Clear-This zone is your goal

Your symptoms are under control

You have:

- No shortness of breath
- No weight gain more than 2 pounds (it may change 1 or 2 pounds some days)
- No swelling of your feet, ankles, legs or stomach
- No chest pain

YELLOW ZONE

Caution: This zone is a warning

Call your doctor's office if:

- You have a weight gain of 3 pounds in 1 day or a weight gain of 5 pounds or more in 1 week
- More shortness of breath
- More swelling of your feet, ankles, legs, or stomach
- Feeling more tired. No energy
- Dry hacky cough
- Dizziness
- Feeling uneasy, you know something is not right
- It is harder for you to breathe when lying down. You are needing to sleep sitting up in a chair

RED ZONE

Emergency

Go to the emergency room or call 911 if you have any of the following:

- Struggling to breathe. Unrelieved shortness of breath while sitting still
- Have chest pain
- Have confusion or can't think clearly



7/12/2006

Heart Failure Patient Education Information

Ejection Fraction

- One measurement your doctor may use to see how well your heart is working is called **ejection fraction** or EF.
- The ejection fraction (EF) is the amount of blood your heart pumps with each heart beat.
- The normal EF of the pumping heart is 50% to 60%.
- Heart failure may happen if the EF is less than 40%.

Treatment for Heart Failure

- Eat less salt and salty type foods.
- Take medicines to strengthen your heart and water pills to help your body get rid of extra fluid.
- Balance your activity with rest. Be as active as you can each day, but also take rest periods.
- Do not smoke.

Medicines You Might Take

- **Diuretic “water pills”** help your body get rid of extra fluid.
- **Beta blocker** lowers blood pressure and slows your heart rate.
- **Ace inhibitor** decreases the work for your heart and lowers blood pressure.
- **Digoxin** helps your heart pump better.

Things for You to Do to Feel Better Each Day

- Follow the guidelines on the St. Luke’s Heart Failure Zone paper.
- Check yourself each day. Which heart failure zone are you in today?
- Watch for warning signs and symptoms, and call your doctor if you are in the yellow zone. Catch the signs early, rather than late.
- Do not eat foods high in salt.
- Do what your doctor tells you to do.

To Learn More about Heart Failure

- Attend St. Luke’s FREE heart failure class
Phone (319) 369-7736 for more information
- Visit the following web sites

www.americanheart.org
www.abouthf.org
www.heartfailure.org

American Heart Association
Heart Failure Society of America
Heart Failure Online



A better place to be

Reducing Sodium in Your Diet

Why do I need less sodium?

Restricting sodium in your diet will help keep you from gaining “water weight,” also called edema. This will also help you control blood pressure.

How much sodium do I need?

This depends on your medical needs. Limiting sodium to 2000- 3000mg of sodium per day are common restrictions. Ask your doctor if you are unsure how much sodium you need.

What should I do first?

- Do not add salt to your foods. Salt is very high in sodium. One teaspoon of salt has 2000mg sodium.
- Start with fresh foods and cook your foods without adding salt.
- Do not eat foods with salt toppings that you can see.

What foods should I not eat?

- Breads and crackers with salt toppings you can see
- Vegetable juice and tomato juice
- Cheese spreads and dips; leave cheese off of your sandwiches
- Ham, deli ham, hot dogs, sausage, bacon
- Choose frozen dinners with less than 600mg sodium per package. Read labels.
- Almost all fast food is high in sodium. Choose foods without breading, pickles, cheese or sauces
- Canned or packaged foods such as soups or noodle mixes
- Snack chips, pickles, olives, salted nuts

What should I eat and drink at my meals?

Try these sample menus for ideas:

Breakfast -1 cup Shredded Wheat, banana, 1 cup milk, 2 slices whole wheat bread, jelly, margarine

Lunch – Sliced roast beef on bun, 2 tsp mayonnaise, lettuce & sliced tomatoes, fresh melon, cooked or raw carrots, 1 cup milk.

Supper – Green salad, 1 TBSP dressing, skinless chicken breast, small baked potato with 1 tsp margarine, frozen mixed vegetables without adding salt, dinner roll, ½ cup sherbet, 1 cup milk.

Snack – vanilla wafers or dish of canned fruit or a fresh apple.

What else can I do to get more information about eating healthier?

It is hard to change the foods you eat. Learning about low sodium eating can be difficult. If you have questions or would like more help in making changes please call a St. Luke's Dietitian.

Workshops are held at St. Luke's every other month on Saturdays to give people help with controlling Heart Failure. Please call St. Luke's Cardiac Rehab Department to find the date of the next workshop. This is a FREE class that includes helpful tips on following a low sodium diet.

If you need help shopping for reduced sodium food choices, local grocery stores may also give information.



Dietitian: 369-8085
Heart Failure Workshop 369-7736

Case Study 2: Cedars Sinai Medical Center, Los Angeles, California

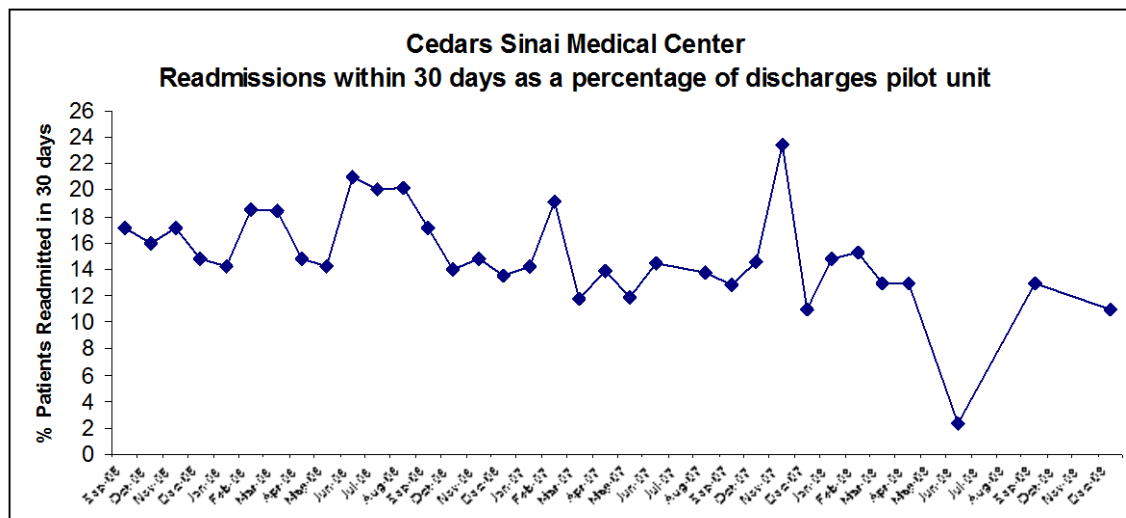
Aim Statement

Short-term reduction in readmission by 50 percent; long-term target readmission rate of 5 percent.

Methodology

1) Improve patient understanding; 2) increase referrals to palliative care for patients with advanced stage heart failure; 3) improve reliability of completion and accuracy of medication reconciliation; and 4) partner with patients and families in the redesign of care.

Results



Changes Tested and Implemented

I. Enhanced Admission Assessment for Post-Hospital Needs

- The team developed a new process for the discharge action plan, which is completed within 24 hours of patient admission; in March 2007 the completion rate was 93 percent.
 - The roles and responsibilities of nurses and clinical partners are explicitly described in discharge guidelines.
- Nurses now identify the patient's family caregivers during multidisciplinary rounds and ask the patient, "Who will be helping with care at home?"
- The team revamped the interdisciplinary team rounds (where patients are typically discussed on hospital Day Two). For each patient, the team must answer four questions:
 - Where will the patient likely go after discharge?

- Who will be providing the care—is this likely to be adequate, or does patient require a higher intensity of care?
- What are the patient's needs after discharge?
- What are the potential discharge barriers?

II. Effective Teaching and Enhanced Learning

- The team partnered with patients and family members to understand patient needs when leaving the hospital:
 - The team designed a letter that is given to patients on admission; the letter provides suggestions on how to make going home easier, including locating keys to the house and clothing for the trip.
 - The team developed a Journey Home communication board.
 - The team began using Teach Back with patient self-care education.
- The team adapted the “agenda-setting cards” (mentioned in Section One) to improve discharge communication.
 - Each card in the deck has a question frequently asked by patients with HF. Questions were gathered from patients by HF nurses. The agenda-setting cards reduce hesitation to ask questions and assist patients with driving the learning agenda.
 - Patients are given the card deck to keep and are encouraged to choose 2 to 3 cards for discussion at each learning opportunity across care settings. To date, the cards have been very successful in the hospital and ambulatory settings.

http://www.ihl.org/ihl/files/TCAB/Transitions_Home/CHF_Cards_July_2007revision.doc

III. Real-Time Patient and Family-Centered Handoff Communication

- The team collaborated with physicians on how to improve the discharge process, resulting in the identification of several suggestions for physicians on how to make the process smoother:
 - During each round, the physician should speak with the nurse regarding care and discharge plans.
 - Specific direct communications between physicians and nurses were identified on rounds or by phone regarding orders for discharge.
- The team focused on actions to improve medication reconciliation upon discharge.

- The team integrated the project into the larger hospital-wide medication reconciliation initiative. On discharge, the staff members print the most recent medication list from the electronic health record and then indicate next to each medication whether it is to be stopped or continued. Instructions for patients on how to take medications must be clearly stated. Concurrently, intravenous medications are converted to oral medications.
- The team used small tests of change to improve admission and discharge reconciliation. The accuracy and completeness of the intake reconciliation form improved to 85 percent and subsequently to 95 percent for the last three quarters measured. Accuracy and completeness of the electronic discharge reconciliation form initially improved to 90 percent and to 100 percent for the last three quarters measured.
- The team reinforced the use of the SBAR (Situation, Background, Assessment, Recommendation) critical communication tool in the discharge planning process.

SBAR Rollout (Scale of 1-5, 5 being very satisfied)

Has the SBAR rollout been successful? 4.73

Has SBAR improved communication? 4.40

I always use SBAR in patient handoffs. 4.53

<http://www.ihl.org/IHI/Topics/PatientSafety/SafetyGeneral/Tools/SBARToolkit.htm>

- The team partnered with the skilled nursing facility (SNF) that receives the largest proportion of the hospital's discharged patients to develop a standard transfer form.
- The team developed a discharge algorithm for discharge to the SNF or home.
- The team partnered the unit social worker and case manager to ensure a smooth transition for discharge of patients with complex issues (e.g., ventilator-dependent patients) to skilled nursing facilities or home. Since implementing this test of change in 2007, there have been no immediate bounce-back admissions to the acute care medical center.
 - The nurse case manager visits the SNF or patient's home prior to the discharge and ensures that all equipment and supplies are ready for the patient.
 - The social worker works with the patient's nurse to prepare and send the patient, many times with family, to the SNF or home.
 - The case manager greets the patient and family upon their arrival at the SNF or home, providing the patient and family with the comfort of a familiar face and ensuring consistency in care.
- The team recognized the value of and increased palliative care referrals from seven to ten per month on the unit between December 2006 and February 2007.

IV. Post-Hospital Care Follow-Up

- The team developed as a standard process giving patients a business card with the contact name and phone number of the discharging unit and encouraging the patients and families to call the unit should questions arise after returning home.
 - The team collected and tracked responses to these questions for insight as to how discharge efforts might be improved. Over half of the calls have been related to medications and, as a result, the discharge team has enhanced education in this area.

Call Backs from Unit Business Cards (N=13)

Seeking medication clarification	83%
Directed to call the physician	8%
Directed to seek ER care	9%

References

1. Fazzi R, Agoglia R, Mazza G, Glading-DiLorenzo J. The Briggs National Quality Improvement/Hospitalization Reduction Study. *Caring*. 2006;25(2):70-75.
2. Alliance for Health Reform. Covering Health Issues 2006-2007. Available at: <http://www.allhealth.org/sourcebooktoc.asp?SBID=1>. Accessed February 18, 2009.
3. Naylor M. *Making the bridge from hospital to home*. The Commonwealth Fund; Fall 2003. Available at: http://www.commonwealthfund.org/spotlights/spotlights_show.htm?doc_id=225298. Accessed June 22, 2007.
4. Grimmer K, Moss J, Falco J, Kindness H. Incorporating patient and carer concerns in the discharge plan: The development of a practical patient-centered checklist. *The Internet Journal of Health Sciences and Practice* [serial online]. 2006 Jan;4(1):1-8. <http://ijahsp.nova.edu/articles/vol4num1/grimmer.pdf>. Accessed August 20, 2007.
5. Levine C. *Rough Crossings: Family Caregivers Odysseys Through the Health Care System*. New York, NY: United Hospital Fund of New York; 1998.
6. Heart Failure Society of America. HFSA 2006 Comprehensive Heart Failure Practice Guideline. *Journal of Cardiac Failure*. 2006;12(1):e1-122. Available at: http://www.heartfailureguideline.org/document/hfsa_2006_comprehensive_heart_failure_guidelines.pdf. Accessed September 12, 2007.
7. Zwicker D, Picariello G. Discharge planning for the older adult. In: Mezey M, Fulmer T, Abraham I, Zwicker DA, eds. *Geriatric Nursing Protocols for Best Practice*. 2nd ed. New York, NY: Springer Publishing Company, Inc.; 2003:292.
8. Forster A, Murff H, Peterson J, Gandhi TK, Bates DW. The incidence and severity of adverse events affecting patients after discharge from the hospital. *Annals of Internal Medicine*. 2003;138:161-167.
9. Getting Started Kit: Prevent Adverse Drug Events (Medication Reconciliation) How-to Guide: <http://www.ihl.org/NR/rdonlyres/98096387-C903-4252-8276-5BFC181C0C7F/0/ADEHowtoGuide.doc>. Accessed March 5, 2009.
10. ASHP Medication Reconciliation Toolkit: http://www.ashp.org/Import/PRACTICEANDPOLICY/PracticeResourceCenters/PatientSafety/ASHPMedicationReconciliationToolkit_1.aspx. Accessed March 5, 2009.
11. Adams K, Corrigan J (eds). Committee on Identifying Priority Areas for Quality Improvement. Board on Health Care Services. *Priority Areas for National Action*. Washington, DC: National Academies Press; 2003.
12. Glasgow RE, Funnell MM, Bonomi AE, et al. Self-management aspects of the Improving Chronic Illness Care Breakthrough Series: Implementation with diabetes and heart failure teams. *Annals of Behavioral Medicine*. 2002;24(2):80-87.
13. Phillips CO, Wright SM, Kern DE, et al. Comprehensive discharge planning with post-discharge support for older patients with heart failure: A meta-analysis. *Journal of the American Medical Association*. 2004;291:1358-1367.
14. The Care Transitions ProgramSM: Transitions Coach. Available at: <http://www.caretransitions.org>. Accessed February 17, 2009.
15. Naylor M. *Making the bridge from hospital to home*. Available at: http://www.commonwealthfund.org/spotlights/spotlights_show.htm?doc_id=225298. Accessed June 22, 2007.
16. Medicare Payment Advisory Commission. *Report to the Congress: Promoting Greater Efficiency in Medicare*, Chapter 5, Payment policy inpatient readmissions, June 2007: 103-120. Available at: http://www.medpac.gov/documents/Jun07_EntireReport.pdf. Accessed March 13, 2009.
17. "What Did the Doctor Say?:" *Improving Health Literacy to Protect Patient Safety*. Oakbrook Terrace, IL: The Joint Commission; 2007. <http://www.jointcommission.org/NR/rdonlyres/D5248B2E-E7E6-4121-8874->

Institute for Healthcare Improvement
How-to Guide: Creating an Ideal Transition Home

[99C7B4888301/0/improving_health_literacy.pdf](#). Accessed September 12, 2007.

18. Osborne H. *Health Literacy from A to Z: Practical Ways to Communicate Your Health Message*. Sudbury, MA: Jones & Bartlett; 2004.

19. Ask Me 3 materials (available in English and Spanish). Available on the Partnership for Clear Health Communication website at <http://www.npsf.org/askme3/>. Accessed March 5, 2009.

20. *Making Health Care Safer: A Critical Analysis of Patient Safety Practices*. Evidence Report/Technology Assessment, No. 43. Agency for Healthcare Research and Quality; 2001. (AHRQ Publication No. 01-EO58). Available online at <http://www.ahrq.gov/CLINIC/PTSAFETY/>. Accessed February 17, 2009.

21. Heart Profilers: Your Treatment Decision Tools®
<http://www.americanheart.org/presenter.jhtml?identifier=1486>. Accessed February 17, 2009.

22. Schillinger D, Piette J, Grumbach K, et al. Closing the loop physician communication w/ diabetic patients who have low health literacy. *Archives of Internal Medicine*. 2003;163:83-90.

23. Committee on Quality of Health Care in America, Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: National Academies Press; 2001.

24. Lappé JM, Muhlestein JB, Lappé DL, et al. Improvements in 1-year cardiovascular clinical outcomes associated with a hospital-based discharge medication program. *Annals of Internal Medicine*. 2004;141(6):446-453.

25. Fonarow GC, Abraham WT, Albert NM, et al. Association between performance measures and clinical outcomes for patients hospitalized with heart failure. *Journal of the American Medical Association*. 2007;297:61-70.

26. My Medicine List™ - Information for Health Professionals. American Society of Health-System Pharmacists. Available at:
<http://www.ashpfoundation.org/MainMenuCategories/PracticeTools/MyMedicineList/InformationforHealthProfessionals.aspx>. Accessed February 17, 2009

27. Balaban RB, Weissman JS, Samuel PA, Woolhandler S. Redefining and redesigning hospital discharge to enhance patient care: A randomized controlled study. *Journal of General Internal Medicine*. 2008;23:1228-1233.

28. Kripalani S, LeFevre F, Phillips CO, et al. Deficits in communication and information transfer between hospital-based and primary care physicians: Implications for patient safety and continuity of care. *Journal of the American Medical Association*. 2007;297(8):831-841.

29. *National Voluntary Consensus Standards for Hospital Care.: Additional Priority Areas—2005-2006*. Washington, DC: National Quality Forum; July 2006. Available at
http://www.qualityforum.org/publications/reports/hospital_care.asp. Accessed February 17, 2009.

30. McAlister FA, Stewart S, Ferrua S, McMurray JJ. Multidisciplinary strategies for the management of heart failure patients at high risk for admission: A systematic review of randomized trials. *Journal of the American College Cardiology*. 2004;18;44(4):810-819.

31. Phillips CO, Wright SM, Kern DE, et al. Comprehensive discharge planning with post-discharge support for older patients with congestive heart failure. *Journal of the American Medical Association*. 2004;291(11):1358-1367.

32. Nolan T, Resar R, Haraden C, Griffin FA. *Improving the Reliability of Health Care*. IHI Innovation Series white paper. Boston: Institute for Healthcare Improvement; 2004. (Available on www.IHI.org.) Accessed March 5, 2009.

33. Langley GL, Nolan KM, Nolan TW, Norman CL, Provost LP. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance*. San Francisco: Jossey-Bass Publishers; 1996.