

# **How-to Guide:**

# Improving Transitions from the Hospital to Community Settings to Reduce Avoidable Rehospitalizations

Support for the How-to Guide was provided by a grant from The Commonwealth Fund.

Copyright © 2013 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:

Rutherford P, Nielsen GA, Taylor J, Bradke P, Coleman E. *How-to Guide: Improving Transitions from the Hospital to Community Settings to Reduce Avoidable Rehospitalizations*. Cambridge, MA: Institute for Healthcare Improvement; June 2013. Available at <a href="https://www.IHI.org">www.IHI.org</a>.

# Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

# **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 leading innovator in health and health care improvement worldwide. For more than 25 years, we have partnered with visionaries, leaders, and front-line practitioners around the globe to spark bold, inventive ways to improve the health of individuals and populations. Together, we build the will for change, seek out innovative models of care, and spread proven best practices. When it comes to raising the quality of health for all, IHI sees boundless possibilities, and while we see the walls in front of us, we will not rest until we reach the other side. Learn more at ihi.org.

**The Robert Wood Johnson Foundation** provided support for the initial development of this How-to Guide through Transforming Care at the Bedside (TCAB), a national program of the Robert Wood Johnson Foundation and the Institute for Healthcare Improvement. The TCAB initiative launched in 2003 and the *TCAB How-to Guide: Creating an Ideal Transition Home for Patients with Heart Failure* was first made available in October 2007.

### **Co-Authors**

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

Gail A Nielsen, BSHCA, Fellow and Faculty, Institute for Healthcare Improvement

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

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

**Eric A. Coleman, MD, MPH,** Professor at the University of Colorado and Director, Care Transitions Program

### **Contributors and Reviewers**

Kate Bones, MSW, Director, Institute for Healthcare Improvement

Maureen Carroll, Heart Failure Program Coordinator, UCSF Medical Center

Christopher Chue, Project Coordinator, Institute for Healthcare Improvement

Sharon Eloranta, MD, Medical Director, Qualis Health

Martha Hayward, Faculty for Person and Family Centered Care, Institute for Healthcare Improvement

Saranya Loehrer, MD, MPH, Director, Institute for Healthcare Improvement

Carol Levine, Director, Families and Health Care Project, United Hospital Fund

Azeem K. Mallick, MBA, Project Manager, Institute for Healthcare Improvement

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

Lorraine Schoen, MS, BSN, RN, Director, Clinical Affairs, Massachusetts Hospital Association

Cory Sevin, RN, MSN, NP, Director, Institute for Healthcare Improvement

Rebecca Steinfield, MA, Improvement Advisor, Institute for Healthcare Improvement

Nancy Vecchioni, RN, MSN, CPHQ, Vice President Medicare Operations, MPRO

Valerie Weber, Editor, Institute for Healthcare Improvement

# **Table of Contents**

I. Introduction	p. <u>1</u>
II. Key Changes	p. <u>6</u>
Partner with Patient and Family to Identify Post-Hospital Needs	p. <u>7</u>
Provide Effective Teaching and Facilitate Learning	p. <u>12</u>
3. Create and Activate Post-Hospital Care Follow-up Plan	p. <u>21</u>
4. Provide Real-Time Handover Communications	p. <u>31</u>
III. Design Elements	p. <u>39</u>
IV. Infrastructure and Strategy to Achieve Results	p. <u>46</u>
Step 1. Identify Executive Leadership	p. <u>46</u>
Step 2. Convene a Cross-Continuum Team	p. <u>47</u>
Step 3. Identify Opportunities for Improvement	p. <u>48</u>
Step 4. Use the Model for Improvement	p. <u>51</u>
Question 1: What are we trying to accomplish?	
Question 2: How will we know that a change is an	
improvement?	
Question 3: What changes can we make that will result in	
improvement?	
Step 5. Implementation, Scale-up, and Spread	p. <u>61</u>
V. System of Measures	p. <u>66</u>
VI. Case Studies	p. <u>73</u>
VII. How-to Guide Resources	p. <u>103</u>
VIII. References	p. <u>131</u>

# I. Introduction

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

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

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

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

Commonwealth Fund (CMWF), a private foundation supporting independent research on health policy reform and a high-performance health system.

# The Case for Creating an Ideal Transition Home and Reducing Avoidable Rehospitalizations

Hospitalizations account for nearly one-third of the total \$2 trillion spent on health care in the United States. <sup>1,2</sup> In the majority of cases, hospitalization is necessary and appropriate. However, experts estimate that 20 percent of US hospitalizations are rehospitalizations within 30 days of discharge. <sup>1,2</sup> According to an analysis conducted by the Medicare Payment Advisory Committee (MedPAC), up to 76 percent of rehospitalizations occurring within 30 days in the Medicare population are potentially avoidable. <sup>3</sup> Avoidable hospitalizations and rehospitalizations are frequent, potentially harmful and expensive, and represent a significant area of waste and inefficiency in the current delivery system.

Poorly executed care transitions negatively affect patients' health, well-being, and family resources and unnecessarily increase health care system costs. Continuity in patients' medical care is especially critical following a hospital discharge. For individuals with multiple chronic conditions, this transition takes on even greater importance. Research shows that one-quarter to one-third of these patients return to the hospital due to complications that could have been prevented. Unplanned rehospitalizations may signal a failure in hospital discharge processes, patients' ability to manage self-care, the quality of care in the next community setting (office practices, home health care, and skilled nursing facilities), and lack of appropriate care resources for high-risk patients.

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

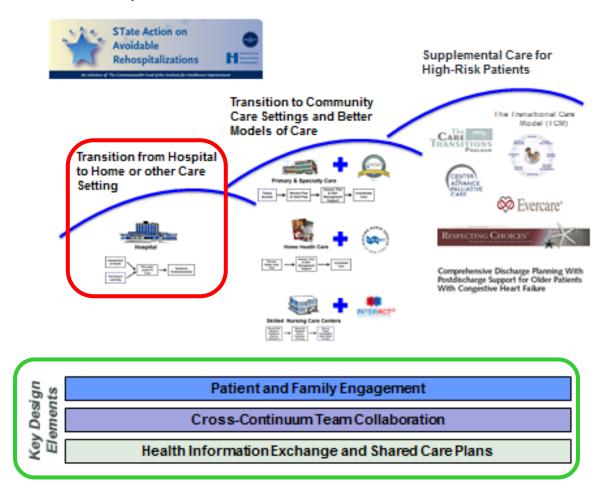
This How-to Guide is designed to support hospital-based teams and their community partners in co-designing and reliably implementing improved care processes to ensure that patients who have been discharged from the hospital have an effective transition to either the home or the next community care setting.

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

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

same interventions and elements of care are equally important for residents of skilled nursing facilities (SNFs) who are transitioning to their homes.

Figure 1: IHI's Roadmap for Improving Transitions in Care after Hospitalization and Reducing Avoidable Rehospitalizations

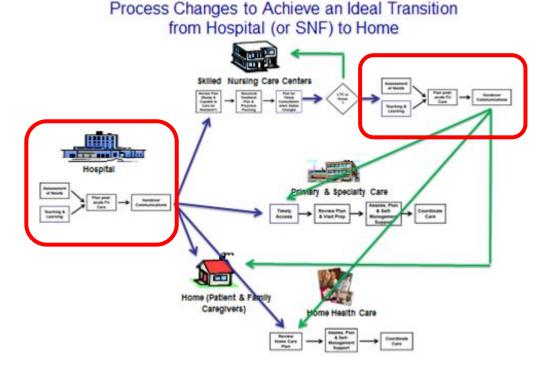


The transition from the hospital to home and other post-acute care settings, which is depicted in the red box in Figure 1, has emerged as an important cornerstone in IHI's work to reduce avoidable rehospitalizations and it is a major focus of this How-to Guide. As Dr. Steve Jencks, notes, "Although the care that prevents rehospitalization occurs largely outside of the hospital, it starts in the hospital." Guidance for leveraging the key design elements to improve care transitions (depicted in the green box in Figure 1) is also included in in Section III of this How-to Guide.

Transitions in care after hospitalization involve both an improved transition out of the hospital (and from post-acute care and rehabilitation facilities) as well as an activated and reliable

reception into the next setting of care such as a primary care practice, specialist, home health care, or skilled nursing facility. The process steps to improve care transitions in each care setting are depicted in Figure 2. An example of an activated community setting of care is a physician's office with a specified process for scheduling post-hospital office visits for high-risk patients within two to five days of discharge.

Figure 2: Process Changes to Achieve an Ideal Transition from the Hospital (or SNF) to Home



The processes to improve care transitions from hospitals or skilled nursing facilities to home are highlighted by the red boxes in Figure 2, and four recommended changes for improving the transition out of the hospital are included in Section II of this How-to Guide. IHI provides additional How-to Guides for the other process changes and improvements recommended for clinical office practices, skilled nursing facilities, and home health care. These How-to Guides are designed to assist clinicians and staff in these sites of care in developing processes that ensure a timely and reliable transition into each of the community-based care settings.

- How-to Guide: Improving Transitions from the Hospital to Skilled Nursing Facilities to Reduce Avoidable Rehospitalizations
- <u>How-to Guide: Improving Transitions from the Hospital to the Clinical Office Practice</u> <u>to Reduce Avoidable Rehospitalizations</u>

# Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

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

Section IV of this How-to Guide also includes guidance on a recommended infrastructure, and strategies for achieving results. Case studies in Section VI give detailed descriptions of how two different organizations implemented successful strategies to reliably implement the changes recommended in this How-to Guide to achieve results in reducing avoidable readmissions.

# II. Key Changes

- 1. Partner with Patient and Family to Determine Post-Hospital Needs
  - 1A. Involve the patient, their family, family caregiver(s), and community provider(s) as full partners in completing a needs assessment of the patient's home-going needs.
  - 1B. Reconcile medications upon admission.
- 2. Provide Effective Teaching and Facilitate Learning
  - 2A. Involve all learners in patient education.
  - 2B. Always use Teach Back throughout the hospital stay to assess the patient's and family caregivers' understanding of discharge instructions and ability to perform self-care.
- 3. Create and Activate Post-Hospital Care Follow-up
  - 3A. Review daily the patient's medical and social risk for readmission and finalize the customized post-hospital follow-up plan.
  - 3B. Prior to discharge, schedule timely follow-up care and initiate clinical and social services as indicated from the identified post-hospital needs as well as the capabilities of patients and family.
- 4. Provide Real-Time Handover Communications
  - 4A. Give patient and family members a patient-friendly, post-hospital care plan which includes a clear medication list.
  - 4B. Provide customized, real-time critical information to the next clinical care provider(s).

# 1. Partner with Patient and Family to Determine Post-Hospital Needs

# **Recommended Changes:**

1A. Involve the patient, their family, family caregiver(s), and community provider(s) as full partners in completing a needs assessment of the patient's home-going needs.

1B. Reconcile medications upon admission.

Most teams believe they are already performing thorough assessments of patient's needs on admission. However, after completing Diagnostic Reviews of patients who have been readmitted to the hospital, team members gain new insights into what they are missing. Clinicians and staff should ask themselves.

"How can we gain a deeper understanding of the comprehensive postdischarge needs of the patient through an ongoing dialogue with the patient, family caregivers, and community providers?"

An initial assessment should be completed upon admission, but ongoing assessment and identification of home-going needs should occur throughout the hospitalization.

# **Identifying Opportunities for Improvement**

Review the findings from the Diagnostic Review (<u>Step 3 in Section IV – Infrastructure</u>
 and <u>Strategy to Achieve Results</u>) with front-line improvement team(s). Periodically
 repeat the Diagnostic Review to continually learn about opportunities for improvement.

# **Recommended Changes**

1A. Involve the patient, their family, family caregiver(s), and community provider(s) as full partners in completing a needs assessment of the patient's home-going needs.

"Family caregivers" is the phrase used in this How-to Guide to represent those individuals who are directly involved in the care of the patient at home or at other community care settings. Visitors to the hospital are not necessarily the persons who best understand the home environment, or the issues of regarding the transfer to another care setting. Nor are visitors necessarily the persons who will help the patient with self-care at home.<sup>6,7</sup> "Community

providers" are all of the clinicians and staff (e.g., home health care, hospice, and palliative care nurses; primary care providers and specialists; skilled nursing facility staff; staff in elder and mental health services; or community service agencies) who have a role in the care of the patient when they are at home or in a skilled nursing facility.

The post-hospital needs assessment should include the following:

- Cognitive and functional capabilities and depression screening;
- Care capacity of the home environment, including whether there is a willing, available, physically and mentally competent family caregiver(s) when and where needed;
- Ability to perform self-care and monitor health status at home or in the community setting
  as needed (i.e., adherence to medication regimen, weighing oneself, completion of a
  symptom log, and blood sugar monitoring); in other words, the patient and/or identified
  family caregiver(s) are able to show that they understand what they need to do to safely
  care for the patient at home;
- Enrollment in primary care and referrals for specialty care and home health care (as indicated);
- Consults regarding hospice or palliative care services for patients with advanced illness;
- Needs for financial assistance to meet care needs are identified; and
- Community support services, such as "Meals on Wheels" or transportation to appointments with health care providers.

The <u>involvement of patients and family caregivers</u> is an essential step in assessing the post-hospital needs of <u>ALL</u> hospitalized patients. Engage in an in-depth conversation with patients and family members to provide opportunities for learning about the comprehensive home-going needs of patients. Suggested elements of this in-depth conversation are below:

- How do you think you became sick enough to come into to the hospital?
- How do you take your medicines at home? Any problems? Any side effects?
- Describe your typical meals at home or at a restaurant.
- When did you last talk with your doctor or nurse? What did you talk about?

What, if anything, worried you before you came to the hospital?

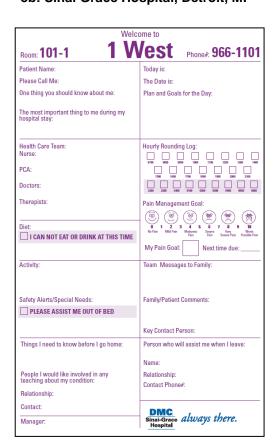
Clinicians should utilize these open-ended statements or questions to discover contributing causes for unplanned admissions or readmissions and worries about going home. Whiteboards in the patients' rooms can be utilized (during the admission assessment, during bedside change of shift reports, and in ongoing conversations with patients and family caregivers) to facilitate these conversations among the care team members, patients, and family caregivers (see Figures 3a and 3b). This information about the home-going needs of patients should be embedded in electronic health records and brought to the daily multidisciplinary care rounds.

Figure 3: Examples of Whiteboards in Patient Rooms

3a: St. Luke's Hospital, Cedar Rapids, IA



3b: Sinai Grace Hospital, Detroit, MI



The care team should ideally provide a way for patients and family caregiver(s) to keep track of the key things they need to know as the patient and family prepares for the transition from the hospital to home or a community-based care facility. One example is the "Going Home: What You Need to Know" tool from United Hospital Fund's Next Steps in Care (Figure 4). Another useful tool to engage patients and family caregivers in discharge preparations is the "SMART"

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

Discharge Protocol" developed by Anne Arundel Medical Center (Figure 5). Care team members should assist patients and family caregiver(s) in completing these tools.

Figure 4: Going Home: What You Need to Know (How-to Guide Resources, page 107)



Available at www.nextstepincare.org/left\_top\_menu/Caregiver\_Home/

Figure 5: SMART Discharge Protocol (How-to Guide Resources, page 110)



Available at <a href="http://alwaysevents.pickerinstitute.org/wp-content/uploads/2011/11/SMART-self-learning-packet1.pdf">http://alwaysevents.pickerinstitute.org/wp-content/uploads/2011/11/SMART-self-learning-packet1.pdf</a>

<u>Involving community providers</u> who have a role in the care of the patient in the community is critical to obtaining a comprehensive picture of the home-going needs of patients. The hospital-based team and the community providers should co-design practical processes to reliably obtain this information when the patient is admitted to the hospital. A few successful approaches are listed here:

 Develop processes to get timely and relevant information from community providers about the patient situation (e.g., medication lists) and insight about the patient's ability to provide self-care and advanced directive intentions.

# Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

- If the admitting nurse cannot reach the community providers, this task should be assigned, specifying who on the care team (e.g. hospitalist, care manager, social worker, etc.) will follow through on this task. This is particularly important for patients who have a complex medical or social situation.
- If the patient has home health care services or utilizes a specific pharmacy, these health care professionals may have the most updated and accurate medication list, as well as information on the patient's history of filling and following medication regimens.
- Many hospital-based teams are collaborating with staff in skilled nursing facilities to standardize the use of communication tools to facilitate transfers of individuals to and from the community-based care facilities. The INTERACT tool "Nursing Home to Hospital Transfer Form" standardizes the transfer of critical information from the SNF to the hospital. Available at <a href="http://interact2.net/tools\_v3.aspx">http://interact2.net/tools\_v3.aspx</a>.

# 1B. Reconcile Medications Upon Admission.

An accurate medication history and reconciliation with hospital admission orders is an important component of safe patient care.

- When taking the patient's medication history, involve the patient, family caregivers, the
  primary care practice, and/or specialists. If possible, consult with the pharmacist from the
  patient's local pharmacy, to ensure the medication history is complete and accurate on
  admission.
- Often, home health care staff have been in the home and have the most up-to-date and accurate list. If the patient has had home health care services, contact the home health care agency for a list of current medications.
- All medications should be reconciled on admission by a suitably trained professional and a record of the reconciliation should be part of the medical record.<sup>8,9</sup> The correct list at admission is crucial to the subsequent success with medication reconciliation.
- See the AHRQ resource "Medications at Transitions and Clinical Handoffs (MATCH)
   Toolkit for Medication Reconciliation" Available at
   <a href="http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/metch/match.pdf">http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/metch/match.pdf</a>.

Recommended Process Measures for Partnering with Patient and Family to Determine Post-Hospital Needs (How-to Guide, System of Measures, page 66)

Use the recommended process measures below to determine how reliably patients, family caregivers, and community providers are included in assessing post-hospital needs:

- Percent of admissions where patients and family caregivers are included in assessing post-hospital needs; and
- Percent of admissions where community providers (e.g., home health care providers, primary care providers, and nurses and staff in skilled nursing facilities) are included in assessing post-hospital needs.

# 2. Provide Effective Teaching and Facilitate Learning

# **Recommended Changes:**

- 2A. Involve all learners in patient education.
- 2B. Always use Teach Back throughout the hospital stay to assess the patient's and family caregivers' understanding of discharge instructions and ability to perform self-care.

The 2007 MedPAC Report notes that patient adherence with discharge instructions affects the rate of rehospitalization. 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 problem is universal; all individuals/patients may struggle with comprehension of clinical conditions, treatment plans, and discharge instructions in the stressful circumstances surrounding a hospitalization and transitions to other care settings. In 2012, new federal policies promote the mainstream adoption of strategies to improve health literacy.

"How can we gain a deeper understanding of patient and family caregiver understanding and comprehension of the clinical condition and self-care needs after discharge?"

Effectively teaching all patients about their clinical conditions, medications, and care plans requires careful design and use of effective patient teaching strategies and written materials to

enhance understanding of what is taught. Improvement teams should strongly consider redesigning printed teaching materials for patient and family caregivers for use in all clinical settings. These materials should include necessary (not "nice-to-know") content, use of a simple layout and design, clear illustrations, and should be written at an appropriate reading level. Partner with patients and family caregivers to test and revise these materials. Use the following two universal principles for health literacy in developing these written materials:

<u>Reader-friendly written materials</u>: Simple words (one to two syllables), 14-point font size, short sentences (four to six words), short paragraphs (two to three sentences), no medical jargon, consistent language, two-word explanations (e.g., water pill or blood pressure pill), no ranges, abundant white space and pictures or visual aids.<sup>13</sup>

 Simplified Heart Failure Patient Teaching Materials. University of North Carolina at Chapel Hill. Available at <a href="www.nchealthliteracy.org/communication.html">www.nchealthliteracy.org/communication.html</a>. 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.

<u>Content redesign</u>: Focus on what the patient needs to know, delivered in easy-tounderstand formats.

- Easy-to-Read Written Materials. US Health Resources and Services Administration.
   Available at <a href="https://www.hrsa.gov/healthliteracy">www.hrsa.gov/healthliteracy</a>. The health literacy section of the website contains free and easy-to-read health brochures and information in various languages.
- The Plain Language Action and Information Network (PLAIN) provides resources for using plain language. Available at: <a href="https://www.plainlanguage.gov/">www.plainlanguage.gov/</a>.

# **Identifying Opportunities for Improvement**

Figure 6: Teach-back Observation Tool (How-to Guide Resources, page 111)



# **Recommended Changes**

# 2A. Involve all learners in patient education.

Patients, family caregiver(s), and other care providers should actively participate in learning about the patient's care plan at home or in the next setting of care. Suggestions for identifying and engaging family caregivers and others who will be helping with their care after discharge from the hospital are included below:

 Visitors to the hospital are not necessarily the persons who best understand the home environment limitations and issues of transferring to another care setting. Nor are they the persons who will help the patient with self-care at home.<sup>6,7</sup> The following questions are useful in discovering both critical information and who the key learners may be:

Who lives with you?

Who helps you with your medications?

Who makes your doctor's appointment?

How will you get to your doctor's appointment?

Who prepares your meals; who cooks?

Who does the housework?

Who does the grocery shopping?

Who else do you want involved in your care?

- Identify who should be present when doing teaching. Note the key learner(s) in the
  patient's chart or electronic health record, and on the whiteboard in the patient's room.
   Obtain patient and family permission to post information on the whiteboard.
- Engage all learners and use Teach Back in teaching about post-hospital plans and instructions about home care.

2B. Always use Teach Back and health literacy principles throughout the hospital stay to assess the patient's and family caregivers' understanding of discharge instructions and ability to perform self-care.

Patients experience several challenges with learning about their participation in their own care after leaving the hospital. Patient education has become largely dependent on traditional teaching methods with little consideration given to what the patient can actually comprehend.

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

# The paradigm needs to shift from focusing on what clinicians are teaching patients to focusing on what patients and their family caregivers are learning!

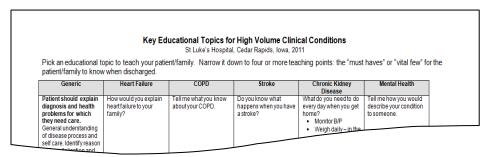
### Guidelines for WHAT to teach:

- During the acute care hospitalization, only essential education is recommended. 14 Focus on key need-to-know points, only what is vital (not "nice-to-know").
- Use Ask Me 3<sup>TM</sup>, which outlines three simple but essential questions that patients should ask their providers to formulate patient teaching:
  - 1) What's my main problem?
  - 2) What should I do for that problem?
  - 3) Why is that important?

Ask Me 3<sup>TM</sup> also encourages patients to advocate to get this information about their care, and reinforces with providers the need to maximize patient and family understanding.<sup>15</sup>

- Emphasize what the patient should do; what action to take.
- The tool depicted in Figure 7 below provides key educational topics for patients with heart failure, chronic obstructive pulmonary disease (COPD), stroke, chronic kidney disease, and mental health diagnoses.

Figure 7: <u>Key Educational Topics for High-Volume Clinical Conditions</u> (How-to Guide Resources, page 112)



# Guidelines for HOW to teach:

 Ask patients and family caregiver(s) how they learn best. Provide as many educational resource alternatives as possible, including written material, videos, audio recordings, face-to-face discussions, and interpretive services.<sup>16</sup>

# Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

- Speak slowly 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.
- Use plain language and eliminate medical jargon. Ensure verbal words and written words match.
- If written materials are used, highlight or circle key information.
- Avoid duplication of paperwork in materials patients take home.

# Using Teach Back to Assess Patient and Family Caregiver Understanding

Teach Back involves asking the patient or family caregiver to recall and restate in their own words what they remember hearing 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. Return demonstration or show back is also a form of "closing the loop" where the patient is asked to demonstrate to the clinician how he or she will do what was taught.

Use Teach Back to assess the patient's and key learners' ability and confidence to perform self-care, take medications, or access help and close the gaps in understanding.<sup>14,18</sup> Key elements of the Teach Back approach are below:

- Explain needed information to all key learners.
- Stop and check for understanding using Teach Back: Ask in a non-shaming way for the individual to explain in his or her own words what was understood. For example, "I want to make sure I explained everything to you clearly. Could you explain to me in your own words...?"
- Check for understanding by the patient after each segment or portion of the information. For example, after telling the patient how to take his/her "water pill," and again after explaining the reasons to call the doctor.
- Patients and caregivers should not feel Teach Back is a test. The emphasis is on how well you explain the concepts, placing the responsibility on the teacher not the learner.

# Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

- If a gap in understanding is identified, offer additional teaching or explanation followed by a second request for the patient to explain back in their own words.
   Emphasize what they must do when they get home.
- Use multiple opportunities while the patient is in the hospital for review of important information to increase patient and family caregiver recall and confidence in the need-to-know, must-do activities.
- If the patient and/or family caregiver cannot Teach Back, consider additional
  assessments or interventions, such as cognitive evaluations. Make appropriate
  adjustments to the transition plan and communicate this information to the
  clinicians in the next settings of care.

The *Always Use Teach Back! Toolkit* was developed to assist individual learners to learn competency of Teach Back. It also provides guidance for managers, educators, and coaches to assist staff and physicians to build the habits of daily use. This toolkit is available at www.teachbacktraining.com.

Use Teach Back or return demonstration to assess the patient's (or family caregiver's) ability to fill prescriptions and adhere to medications. Non-adherence to a medication regimen may be driven by literacy skills, ineffective teaching, and lack of resources to purchase medications and secure transportation. <sup>19</sup> Consider using a standardized template to prompt nurses and other clinicians to document the patient's understanding of what was taught, for example, a formatted Teach Back note in the patient's chart (Figures 8 and 9).

Figure 8: Baystate Medical Center Teach Back Note

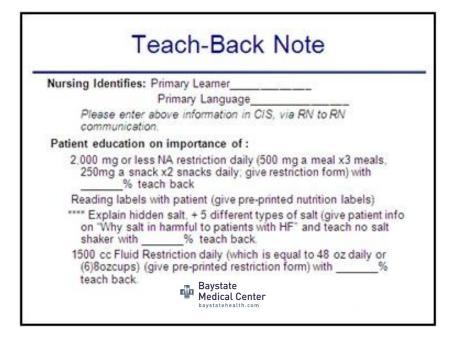
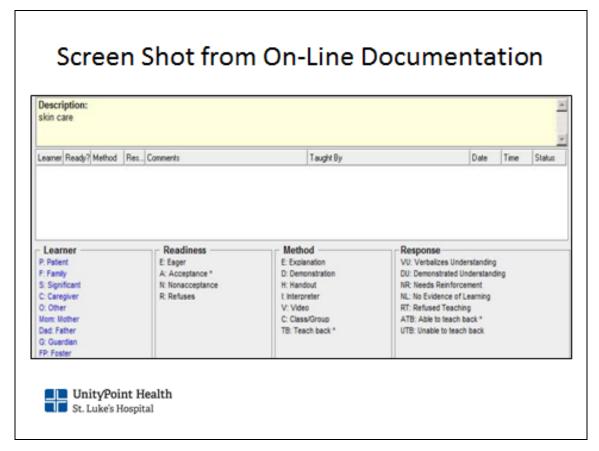
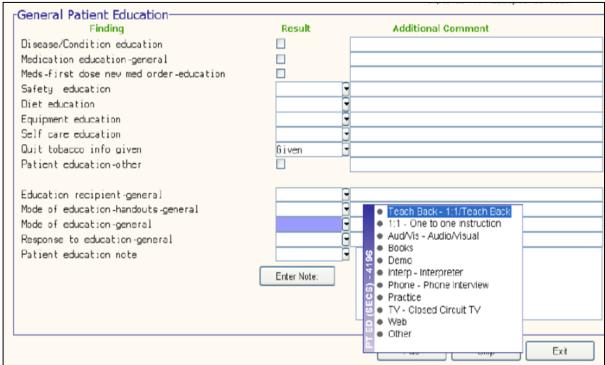


Figure 9: UnityPoint Health On-Line Documentation of Teach Back





Many hospital teams have spread Teach Back competencies to all nursing staff and built this into yearly competency validation process. Teach Back must be practiced and role playing Teach Back is an excellent learning opportunity.

Figure 10: Example of a Program to Assess Nurses' Teach Back Competencies

# St Luke's Hospital, Cedar Rapids, Iowa Nursing Competency Assessment for Teach Back Annual Teach Back Competency Validation Day Methodology The learning station will use discussion, role playing and patient teaching scenarios to help RNs communicate effectively with patients and family members. Each individual will participate in a role-play providing education to a patient. The following will be assessed: Ability to do teach back in a shame-free way, e.g. tone is

- positive
- Utilization of plain language for explanations
- Whether individuals ask -- "Do you understand?"
  - UnityPoint Health
    St. Luke's Hospital

A full description of this <u>Teach Back Competency Assessment Program</u> can be found on page 111 in the Resources Section. Effective use of Teach Back requires that users of Teach Back learn competency and build the habit of daily use. The tools to build this competency are available in the toolkit <u>www.teachbacktraining.com</u>.

Recommended Process Measures (How-to Guide System of Measures, page 66)

Use these measures to determine the effectiveness of Teach Back training processes:

Percent of observations of nurses teaching patient or other identified learner where
 Teach Back is used to assess understanding.

# 3. Create and Activate Post-Hospital Care Follow-up

# **Recommended Changes:**

3A. Review daily the patient's medical and social risk for readmission and finalize the customized post-hospital follow-up plan.

3B. Prior to discharge, schedule timely follow-up care and initiate clinical and social services as indicated from the identified post-hospital needs and the capabilities of patients and family.

A high percentage of rehospitalizations occur in the immediate days or weeks following hospital discharges. A national Medicare analysis found 50 percent of patients who were rehospitalized within 30 days had no intervening physician visit between discharge and rehospitalization.<sup>5,10</sup> The Phillips meta-analysis found that comprehensive discharge planning and post-hospital support reduced rehospitalizations by 25 percent overall.<sup>20,21</sup> Strategies included single home visit, increased clinic follow-up, and home visits. In 15 of 18 trials that evaluated cost, using a multidisciplinary strategy was identified as a key intervention.<sup>20,22</sup> Surveys of the published evidence reveals the current body of published interventions to reduce rehospitalizations.<sup>23-26</sup>

"How can we develop a post-acute care plan based on the assessed needs and capabilities of the patient and family caregivers?"

A customized and structured discharge plan based on patient needs "reduces readmission rates for older people admitted to the hospital with a medical condition."<sup>21</sup> 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 assessment of the patient's needs and capabilities.<sup>20</sup>

### **Identifying Opportunities for Improvement**

Chart the number of readmissions on each day after patients are discharged from the
hospital and create a visual display or histogram to show patterns. Review these
patterns to inform your improvement efforts to initiate a plan of care for each patient to
meet assessed needs. See Figure 11 below for an example.

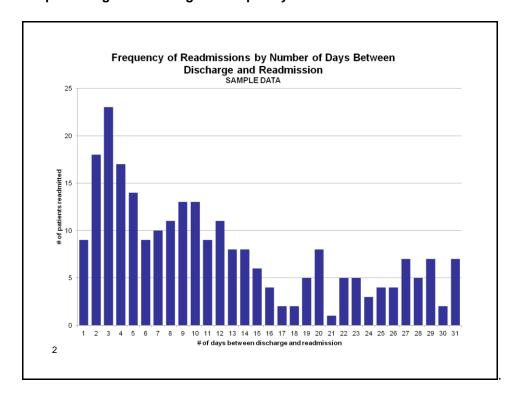


Figure 11: Sample Histogram Showing the Frequency of Readmissions

# **Recommended Changes**

# 3A. Review daily the patient's medical and social risk for readmission and finalize the customized post-hospital follow-up plan.

Completing a comprehensive assessment of the post-hospital needs, which began on admission, is an ongoing process that requires the multidisciplinary team to build upon the information throughout the hospital stay to create the individualized discharge plan. Use the findings from this ongoing assessment of the patient or family caregiver's understanding of self-care needs to determine: 1) whether home or a community-based care setting is indicated; 2) the timing and type of follow-up care required by physicians and other health care providers; and 3) which additional community-based supports might be needed.

Although a number of risk-assessment tools are reported in the literature, there are inconsistencies regarding which characteristics and/or variables are most predictive of patients who are at risk for rehospitalization.<sup>27</sup> Eric Coleman, MD, offers the following guidance regarding identification of patients at high risk for admission:

"Ideally a risk tool would not only identify those at high risk for readmission but more precisely those who have modifiable risk. In other words, risk tools should be aligned with what we understand about how our interventions work and for which patients our interventions work best. In the case of heart failure, we should be careful to not assume that the primary readmission for heart failure is after all... the heart. Low health literacy, cognitive impairment, change in health status for a family caregiver, and more may be greater contributors than left ventricular ejection fraction. Asking the patient directly to describe in her or his own words the factors that led to the hospitalization and where they need our support may provide greater insight into risk for return." The data elements or variables in risk tools available are largely similar. Some require more advanced data capabilities than others. There are inconsistencies regarding which characteristics are most predictive. One possible explanation is that non-patient factors may have a larger role in readmission rates, such as the health care system and access."

Figure 12 below provides a practical way to assess the patient's risk for rehospitalization.

Ongoing review of patients who are readmitted may add important insights which may inform adaptation to your own criteria for assessing a patient's risk for readmission.

Figure 12: Categories of a Patient's Risk of Rehospitalization

High-Risk Patients	Moderate-Risk Patients	Low-Risk Patients
<ul> <li>Patient has been admitted two or more times in the past year</li> <li>Patient or family caregiver is unable to Teach Back, or the patient or family caregiver has a low degree of confidence to carry out self- care at home</li> </ul>	<ul> <li>Patient has been admitted once in the past year</li> <li>Patient or family caregiver is able to Teach Back most of discharge information and has a moderate degree of confidence to carry out self-care at home</li> </ul>	<ul> <li>Patient has had no other hospital admissions in the past year</li> <li>Patient or family caregiver has a high degree of confidence and can Teach Back how to carry out selfcare at home</li> </ul>

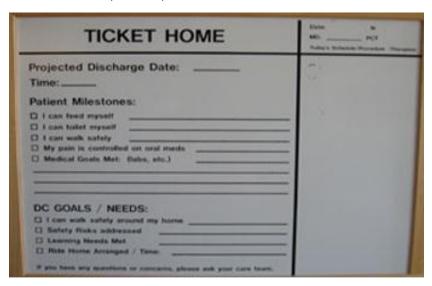
Suggestions for <u>developing a post-acute care plan</u> based on the assessed needs and capabilities of the patient and family caregivers are listed below:

- Develop one comprehensive assessment of post-acute care needs (patient's needs and capabilities) that integrates input from all members of the care team. Make sure each member of the care team is clear about what information they must bring to daily rounds each day. Examples of information that bedside nurses should bring to daily rounds include:
  - Ongoing assessment of comprehensive discharge needs (not solely on admission);
  - Assessment of patients and/or family caregivers understanding of the posthospital plans and self-care (using Teach Back); and
  - Answers from patient and family caregiver to the following question "Do you
    have any concerns or worries about going home or to the next care setting?"
- Expand the focus of daily multidisciplinary rounds (MDRs) or patient care rounds to
  include a dual focus on optimizing care in the hospital and decreasing the length of stay,
  while simultaneously initiating a plan to meet the post-hospital care needs of patients
  and to prevent avoidable readmissions. Recommended topics for discussion include:
  - What are the goals/reasons for this admission? Are the health care team's goals the same as the patient's and family's?
  - What needs to happen during this hospitalization? What are the criteria that indicate the patient's readiness for discharge?
  - As the patient approaches the discharge date, the multidisciplinary care team should ask the questions: "What is the likelihood that this patient will be readmitted in 30 days? If the likelihood is high, why?" and, "If the care team assesses that the patient is likely to be readmitted, what follow-up care and selfmanagement supports can be initiated to better support the patient at home or in the next setting of care?"

- To facilitate communications among the care team, the patient and the family caregivers, use the whiteboard in the patient's room to communicate. Communicate the daily goals for the hospital care, the expected discharge date, the post-hospital care plan, and patient and family caregiver questions, concerns, and worries. (See examples of whiteboards in Figure 13). If multidisciplinary rounds do not occur at the bedside, this information should be regularly communicated to the multidisciplinary care team at daily rounds.
- Proactively initiate advanced illness planning and palliative care referrals for patients
  who have had numerous rehospitalizations. If you do not currently have a palliative care
  program in your hospital, the Center to Advance Palliative Care website contains a
  wealth of resources and information (www.capc.org).
- Communicate as early as possible with community-based providers, if referrals for home health care, skilled nursing facilities, case managers, or a transitions coach or APNs are under consideration.<sup>4,29,30</sup>

Figure 13: Example of Discharge Planning at the Patient's Bedside

Virginia Mason Medical Center, Seattle, WA



www.ihi.org/knowledge/Pages/ImprovementStories/ShesGotaTicketToGoHome.aspx

For more information on creating a customized discharge plan, please refer to the following resources:

Centers for Medicare & Medicaid Services' *Your Discharge Planning Checklist*. Available at www.medicare.gov/publications/pubs/pdf/11376.pdf.

Project BOOST *Tool for Addressing Risk: A Geriatric Evaluation for Transitions*. Available at <a href="http://www.hospitalmedicine.org/ResourceRoomRedesign/RR">http://www.hospitalmedicine.org/ResourceRoomRedesign/RR</a> CareTransitions/PDFs/TARG ET.pdf.

For Patients: Leaving the Hospital and Going Where? United Hospital Fund Next Step in Care Campaign. Available at

www.nextstepincare.org/left top menu/Caregiver Home/Leaving the Hospital?tr=y&auid=8100367&tr=y&auid=8251293.

For Providers: Hospital Discharge Planning – First Steps with Family Caregivers. United Hospital Fund Next Step in Care Campaign. Available at <a href="https://www.nextstepincare.org/uploads/File/Guides/Provider/Provider\_Hospital\_Discharge\_Planning.pdf?tr=y&auid=8100387&tr=y&auid=8251301">https://www.nextstepincare.org/uploads/File/Guides/Provider/Provider\_Hospital\_Discharge\_Planning.pdf?tr=y&auid=8100387&tr=y&auid=8251301</a>

3B. Prior to discharge, schedule timely follow-up care and initiate clinical and social services as indicated from the assessment of post-hospital needs and the capabilities of patients and family caregivers.

Scheduling follow-up physician office visits and initiation of home health care and community resources before the patient leaves the hospital is recommended. Teams have succeeded in successfully scheduling appointments by partnering with providers to create a simplified process for scheduling, and by getting patient input regarding the best times for them to arrange transportation. Hospital staff should create processes for assigning patients to a primary care provider if they do not have one. Also, front-loading clinical and support services in the immediate post-hospitalization period has proven to be effective in decreasing rehospitalizations rates for patients with heart failure.<sup>29</sup>

Post-hospital follow-up phone calls have been frequently cited as a cost-effective method to assess how the patient and family caregivers are managing self-care needs after discharge from the hospital. In a study by Balaban et al, research reports that patients who received an outreach call after discharge had a higher rate of attendance at the scheduled follow-up office visit and had fewer undesirable post-hospital outcomes.<sup>30</sup> Follow-up phone calls are generally

# **Institute for Healthcare Improvement**

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

conducted by clinical staff in the hospital or in clinical settings outside the hospital<sup>20,31-34</sup> (e.g., heart failure clinics or primary care), by advanced practice nurses, care managers, or by staff in call centers. During the calls, the nurses should use Teach Back to verify that the patient: 1) has filled all prescription(s), knows how and when to take medication(s), and understands other critical elements of self-care; 2) recalls why, when, and how to recognize the worsening symptoms and when and whom to call for help; and 3) confirms the date and time of the follow-up physician appointment and has arranged transportation for the visit. More information about follow-up phone calls can be found in the STAAR Issue Brief: Enhancing the Effectiveness of Follow-up Phone Calls to Improve Transitions in Care.<sup>35</sup>

Figure 14 below provides guidance for initiating a post-acute care plan for each level of patients' risk for readmission.

Figure 14: Post-Acute Follow-up Care Based on a Patient's Risk of Rehospitalization

High-Risk Patients	Moderate-Risk Patients	Low-Risk Patients		
<ul> <li>Patient has been admitted two or more times in the past year</li> <li>Patient or family caregiver is unable to Teach Back, or the patient or family caregiver has a low degree of confidence to carry out self-care at home</li> </ul>	<ul> <li>Patient has been admitted once in the past year</li> <li>Patient or family caregiver is able to Teach Back most of discharge information and has a moderate degree of confidence to carry out self-care at home</li> </ul>	<ul> <li>Patient has had no other hospital admission in the past year</li> <li>Patient or family caregiver has a high degree of confidence and can Teach Back how to carry out self-care at home</li> </ul>		
Post-acute Follow-up Care				
Prior to discharge:	Prior to discharge:	Prior to discharge:		
<ul> <li>Schedule a face-to-face follow-up visit within 48 hours of discharge. Care teams should assess whether an office visit or home health care is the best option for the patient.</li> <li>If a home health care visit is initiated in the first 48 hours, also schedule a physician office within 5 days.</li> <li>Initiate intensive care management programs as indicated (if not provided in primary care or in outpatient specialty clinics (e.g. heart failure clinics and patient-centered medical homes).</li> <li>Provide 24/7 phone number for advice about questions and concerns.</li> </ul>	<ul> <li>Schedule a follow-up phone call within 48 hours of discharge and schedule a physician office visit within 5 to 7 days.</li> <li>Initiate home health care services (e.g., transition coaches) as needed.</li> <li>Provide 24/7 phone number for advice about questions and concerns.</li> <li>Initiate a referral to social services and community resources</li> </ul>	<ul> <li>Schedule a follow-up phone call within 48 hours of discharge and schedule a physician office visit as ordered by the attending physician.</li> <li>Provide 24/7 phone number for advice about questions and concerns.</li> <li>Initiate a referral to social services and community resources as needed.</li> </ul>		
<ul> <li>Initiate a referral to social services and community resources as needed.</li> </ul>	as needed.			

Two evidence-based <u>transitional care models</u> for patients who have been discharged from the hospital have shown to be effective in improving care and in reducing avoidable readmissions.

The Care Transitions Intervention<sup>™</sup> Transitions Coach (Coleman) Model.
 Available at <a href="https://www.caretransitions.org">www.caretransitions.org</a>. A "Transition Coach" encourages patients to

take a more active role in their care and empowers them with skills, tools, and confidence to ensure their needs are met during the transition from hospital to home.

Advanced Practice Nurse-Driven Transitional Care (Naylor Model). [Naylor MD, et al. Transitional care of older adults hospitalized with heart failure. A randomized, controlled trial. Journal of the American Geriatrics Society. 2004 May:52(5):675-684.] APNs use an evidenced-based protocol for care, based on national heart failure guidelines and designed especially for this patient care group and their caregivers. APNs design and coordinate care with patients and providers and attend the first post-acute physician office visit.

Patients who are assessed to be at high risk for readmission should ideally have some form of **supplemental intensive care management** after discharge from the hospital and in some cases ongoing care management. For more information on a sampling of intensive care management programs for high-risk patients, refer to the following resources:

- Advanced Practice Nurse-Driven Transitional Care (Naylor Model) (as described above).
- Evercare Model. [Kane RL, Keckhafer G, et al. The effect of Evercare on hospital use. Journal of the American Geriatrics Society. 2003;51(10):1427-1434.] The nurse practitioner and care managers develop and manage personalized care plans, coordinate multiple services, and help facilitate better communication between physicians, institutions, and patients and families. Care is focused based on patient needs.
- Heart Failure Clinics provide a combination of chronic care and disease
  management principles, home telemonitoring and work closely with primary
  care providers. A review of 18 randomized studies showed a reduction in hospital
  readmissions or shortening of hospitalization with heart failure clinics. [Gustafsson
  F, Arnold JM. Heart failure clinics and outpatient management: Review of the
  evidence and call for quality assurance. European Heart Journal.
  2004;25(18):1596-1604.]

# Institute for Healthcare Improvement

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

- Gilfillan RJ, et al. <u>Value and the medical home: Effects of transformed primary care.</u>
   American Journal of Managed Care. 2010;16(8):607-614.
- Nutting PA, et al. Initial lessons from the first national demonstration project on practice transformation to a patient-centered medical home. *Annals of Family Medicine*. 2009;7(3):254-260.
- Health Plan Partnership with Disease Management Service. Blue Shield of California.
   Available at <a href="www.blueshieldca.com/hlr">www.blueshieldca.com/hlr</a>. Features patient-centered management protocols with a complex care team to follow patient closely.
- Medicare Demonstration Project for High-Cost Beneficiaries. Massachusetts General Hospital. Available at www.massgeneral.org/News/assets/pdf/CMS\_project\_phase1FactSheet.pdf.
- Program of All-inclusive Care for the Elderly (PACE). National PACE Association.
   Available at <a href="www.npaonline.org/website/article.asp?id=12">www.npaonline.org/website/article.asp?id=12</a>. [Nadash P. Two models of managed long-term care: Comparing PACE with a Medicaid-only plan. Gerontologist. 2004 Oct;44(5):644-654.]
- Visiting Nurse Service of New York (VNSNY). Available at <a href="www.vnsny.org">www.vnsny.org</a>. Focus is on the first 30 days of a patient's transition from one care setting to another, aimed at reducing the number of handovers. It includes all settings: referring provider and facility, VNSNY Care Team, the primary physician and patient/family, community and long-term care/skilled nursing facility.

# Recommended Measures (<u>Data Reporting Guidelines</u>, How-to Guide System of Measures, page 66)

Use this measure to determine the reliability of the processes for scheduling follow-up office visit appointments for patients discharged from the hospital.

 Percent of patients discharged who had a follow-up visit with a physician scheduled before being discharged.

# 4. Provide Real-Time Handover Communications

# **Recommended Changes:**

- 4A. Give patient and family members a patient-friendly, posthospital care plan which includes a clear medication list.
- 4B. Provide customized, real-time critical information to the next clinical care provider(s).

Clinicians across the health care continuum often provide care without the benefit of having complete information about the patient's condition. <sup>14</sup> Don't confuse communication with information. Inadequate transfer of information (the "handover") 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. <sup>36</sup>

How can we effectively communicate post-acute care plans to patients and community-based providers of care?

There are a few critical elements of patient information that should be available at the time of discharge to community providers. The hospital care team and clinical providers in the next settings of care should agree on the information needed and design reliable processes for information handovers. Written handover communication for high-risk patients is insufficient; direct verbal communication allows for inquiry and clarification.

Patients and families are better able to participate in next steps after hospitalization when they have clear, specific, easy-to-read information. Resources and tools are available to help clinicians provide pertinent information for patients and family caregivers in user-friendly formats.

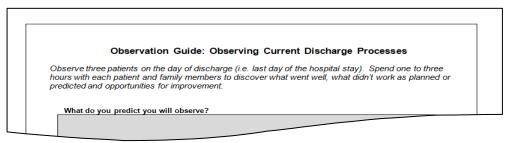
# **Identifying Opportunities for Improvement**

- Assess the usefulness of handover information through ongoing dialogue with members of the community-based providers.
- Review feedback from patients and family members regarding the usefulness of the written discharge plan (e.g., HCAHPS scores and narrative feedback).

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

- Spend one to three hours with a patient on the last day of the hospital stay to identify
  what went well and what didn't work as planned during the hospitalization. Use the
  Observation Guide: Observing Current Discharge Processes (Figure 15) to capture
  information about what was observed.
- Assess whether the patient's discharge plan is received by the primary care physician
  and specialists before the patient's scheduled follow-up office visit. Verify the usefulness
  of the discharge information with these physicians. This could occur during crosscontinuum team meetings.

Figure 15: Observation Guide: Observing Current Discharge Processes (How-to Guide Resources, page 114)



# **Recommended Changes**

# 4A. Give patient and family members a patient-friendly, post-hospital care plan which includes a clear medication list.

The process of <u>medication reconciliation upon discharge</u> complements the process of medication reconciliation upon admission, 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 handover report to the next caregivers. On discharge, patients and family caregivers should receive a clear, updated, reconciled, and patient-friendly medication list. This medication list should include clearly stated instructions for how the patient should take the medications and should highlight new medications or changes. The medication list should help the patient and family understand the following:

- The name of each medication (as the patient and family know it) and the reason for taking it;
- Pre-hospital medications that the patient should discontinue (a "red stop sign" to indicate when a medication should be stopped can be helpful);

# Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

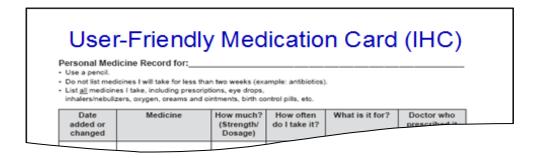
- Circle or highlight changes in the dose or frequency compared with pre-hospital instructions;
- Pre-hospital medications that are to be continued with the same instructions;
- Prescribed and over-the-counter medications that should not be taken; and
- If the patient is being transferred to a skilled nursing facility, reconcile medication discrepancies with the formulary of the community facility.

Encourage patients and families to use a tool or document that does not require reliance on memory, such as a personalized medication list. Figures 16 and 17 provide resources to help patients understand when and how to take their medications.

Figure 16: How to Create a Pill Card (How-to Guide Resources, page 116)



Figure 17: User-Friendly Medication Card (How-to Guide Resources, page 116)



Also available at <a href="https://www.ihconline.org/aspx/consumerresources.aspx#MedCard">www.ihconline.org/aspx/consumerresources.aspx#MedCard</a> Anchor.

The **post-hospital follow-up care** presents a critical opportunity to address the conditions that precipitated the hospitalization or rehospitalization and prepare the patient and family caregivers for self-care activities. Suggestions for helping patients and family caregivers to transition to home are noted below:

- Ensure that the patient and family caregivers assisting the patient with self-care
  are present for discharge instructions; ensure they are engaged in the plan and
  discharge instructions and fully understand what to do once the patient is
  discharged.
- Provide the patient and family caregivers with written information about what to
  expect once the patient returns home, e.g., 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.
  Inform the patient what information to take to follow-up appointments.
- Explore community support systems as needed and provide patients with potential resources to support their ongoing care needs (e.g., aging services networks, community centers).
- 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 patient goes
  home.

## Resources for developing patient-friendly post-hospital care plans:

• Taking Care of Myself: A Guide for When I Leave the Hospital – a toolkit (Figure 18) from the Agency for Healthcare Research and Quality (AHRQ) that helps patients by answering such questions as: Whom do I contact if I have a problem? What is my diagnosis? What medicines have I been prescribed and when should I take them? Which foods should I eat and what exercises should I do? Which should I avoid? When are my next medical appointments, and what should I know about them? What medicines can I safely take for headaches or other health problems?

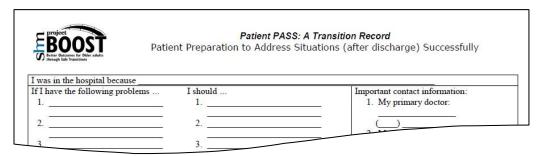
Figure 18: AHRQ Toolkit - Taking Care of Myself: A Guide for When I Leave the Hospital (How-to Guide Resources, page 117)



Available at <a href="www.ahrq.gov/qual/goinghomeguide.htm">www.ahrq.gov/qual/goinghomeguide.htm</a>. Print copies of the bilingual guide (English/Spanish) are available by sending an email to <a href="mailto:ahrqpubs@ahrq.hhs.gov">ahrqpubs@ahrq.hhs.gov</a>.

 Project BOOST has developed a Transition Record (Figure 19) to help patients successfully address situations the patient is likely to encounter after leaving the hospital.

Figure 19: BOOST Patient PASS: A Transition Record (How-to Guide Resources, page 120)



#### Available at

www.hospitalmedicine.org/ResourceRoomRedesign/RR\_CareTransitions/html\_CC/12ClinicalTools/0 1\_Toolkits.cfm.

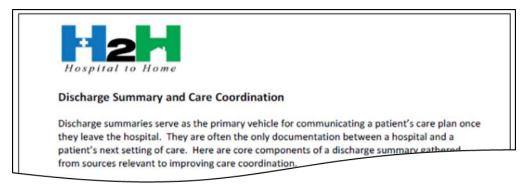
#### 4B. Provide customized, real-time critical information to the next clinical care provider(s).

Identify the patient's care providers (e.g., physicians, home health care clinicians, and other care providers) and transmit critical information to them at the time of discharge. <u>Ideally, the transmission of critical information precedes or is sent at the time of discharge</u>. Provide an easy-access phone number in the hospital for the clinical care providers to use when questions arise.

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, pending labs and other tests, and the patient's or family caregivers' ability and confidence in providing self-care. Without this critical information, providers may duplicate services, overlook important aspects of the care plan, or convey conflicting information to the patient. 30,36-38 The "Transitions of Care Consensus Policy Statement" provides guiding principles that address the physician's accountability for creating the discharge summary and for managing care transitions between inpatient and outpatient settings. 30,36-40 These principles could be used by the multidisciplinary care team to guide planning post-hospital follow-up for all patients.

Leaders of the Hospital to Home (H2H) Initiative have drafted guidance for completing a discharge summary to communicate the patient's care plan and to contribute to the coordination of care (Figure 20).

Figure 20: Hospital to Home Discharge Summary (How-to Guide Resources page 121)



If the **patient is transitioning to home** and will be receiving care in a primary care office or specialty practice:

- Ensure that the real-time critical information is sent at the time of discharge and the discharge summary is received by the practice prior to the patient's first follow-up visit.
- Arrange for access to patient discharge instructions in the office practice or encourage the patient or family member to take the discharge instructions to the follow-up office visit.
- Provide office practices and skilled nursing facilities with a copy of the patient education packet. Use the same material, if possible, or build on each others'

content.

If the <u>patient is transitioning to a home health care agency, long-term care (LTC), skilled</u> <u>nursing facility, or other care setting in the community</u>, there are some issues to consider when establishing processes for communicating important information about patients at the time of discharge:

- Consider establishing a home health care, skilled nursing facility, or long-term care liaison that will based in the hospital. For example, one home health care agency provides a hospital-based liaison to assist physicians in daily patient reviews to determine qualification for home health care.
- Work with these liaisons to standardize critical information to be included in a handover communication tool.
- Ask care teams in the receiving care setting for their preferred format and mode of communication and specific information needs. Many hospital-based teams are collaborating with staff in skilled nursing facilities to standardize the use of communication tools to facilitate transfers of individuals to and from the community-based care facilities. The INTERACT tool "Hospital to Post-Acute Care Transfer Form" standardizes the transfer of critical information from the hospital to the SNF. Available at <a href="http://interact2.net/tools\_v3.aspx">http://interact2.net/tools\_v3.aspx</a>.
- Share patient education materials and educational processes across care settings.
- Offer education for the staff in the LTC or SNF, home health care agencies, and community agencies to create bidirectional communication and feedback processes for coordination and greater understanding of the patient and/or family caregiver needs.

For high-risk patients, a clinician (e.g., hospitalist, care manager) should call the post-acute care provider that is listed as the individual the patient will call for emergent needs. They should discuss the patient's status and plan of care. We should not assume written information will provide all the needed details. Direct verbal communication is needed in these high-risk cases to allow for dialogue about the patient's clinical status as well as opportunities for inquiry and clarification about the plan of care. A personal phone call or "warm handover" communication

#### **Institute for Healthcare Improvement**

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

with the next clinical provider provides a mechanism for bidirectional communication and a better understanding of the patient and family caregiver needs.

Recommended Measures (<u>Data Reporting Guidelines</u>, How-to Guide System of Measures, page 66)

Use these measures to determine the reliability of your processes for providing patients and their outpatient care providers with timely and appropriate information:

- Percent of patients discharged who receive a customized discharge plan written in patient-friendly language at the time of discharge.
- Percent of discharges where critical information is transmitted at the time of discharge to the next site of care (e.g., home health, long-term care facility, rehabilitation care, physician office).

## **III. Design Elements**

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

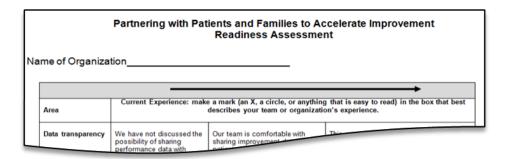
## **Patient and Family Caregiver Engagement**

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

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

Jim Anderson, former Chairman of the Board at Cincinnati Children's Hospital and Medical Center, articulated the challenges for health care leaders in this way "Start Before You Are Ready!" Figure 21 is a document which was adapted for improving care transitions from the Cincinnati Children's Hospital readiness assessment for *Partnering with Patients and Families to Accelerate Improvement*.

Figure 21. Readiness Assessment (How-to Guide Resources, page 122)



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

- · Patient and family experience;
- Delivery of services for patients and families;
- Educational programs, classes, and written materials for patients;
- Program development such as for the transitions in care team;
- Education/orientation of hospital associates;
- Facility design or renovation;
- Reviewing accomplishments and setting goals; and
- Recruiting new members.

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

Partnering with Patients and Families to Design a Patient- and Family-Centered Health Care System: A Roadmap for the Future. Institute for Healthcare Improvement. Available at

www.ihi.org/knowledge/Pages/Publications/PartneringwithPatientsandFamilies.aspx.

#### **Institute for Healthcare Improvement**

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

Tools for Advancing the Practice of Patient- and Family-Centered Care. Institute for Patient- and Family-Centered Care. Available at <a href="https://www.ipfcc.org/tools/downloads.html">www.ipfcc.org/tools/downloads.html</a>.

Berwick D. What 'patient-centered' should mean: Confessions of an extremist. *Health Affairs (Millwod)*. 2009 Jul-Aug;28(4):w555-65. Epub 2009 May 19.

Taylor J, Rutherford P. The pursuit of genuine partnerships with patients and family members: The challenge and opportunity for executive leaders. *Health Services Management*. 2010 Summer;26(4):3-14. Available at <a href="https://www.ihi.org/knowledge/Pages/Publications/PursuitGenuinePartnershipswithPatients">www.ihi.org/knowledge/Pages/Publications/PursuitGenuinePartnershipswithPatients</a> <a href="maily.aspx.">Family.aspx.</a>

#### **Cross-Continuum Team Collaboration**

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

Leadership for successful cross-continuum teams varies. Some are initiated by hospital executives who invite representatives from community-based sites of care and community agencies that received their patients to learn and test changes in collaboration with hospital-based teams. Quality Improvement Organizations (QIOs) are bringing together hospitals, nursing homes, patient advocacy organizations, and other stakeholders in community coalitions where in many cases leadership arises from a community-based leader. Regardless of the initial leadership, the purpose of the cross-continuum team collaboration is to work together toward a common goal and to co-design care transition processes that keep patients safe during the transitions between care settings and to coordinate the care of patients.

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

#### Oversight Role

- Identify opportunities and establish aims to improve care transitions.
  - Surface failures and diagnose systemic gaps in care transitions and identify and/or test new ideas;
  - Review and analyze the readmission data and data about patient/family experiences;
  - Complete periodic diagnostic reviews of cases where patients have been readmitted to engage all clinicians and staff in the community and to continually learn about opportunities for improvement; and
  - Create a common aim and look at linkages of processes where cooperation is required.
- Build capability to partner with patients and family caregivers.
  - Add patients and family caregivers to the cross-continuum team to enhance the focus on patient/family experiences and enable their participation in improving care processes.
- Build capability and capacity in partnering across organizational boundaries.
  - Develop mutual familiarity with the characteristics and needs of each setting by having members from the cross-continuum team visit each other's' sites to observe patient care processes during transitions (e.g., hospital and home care nurses shadow each other in the hospital and home visits); and
  - o Rotate meetings in the different sites.

#### Portfolio Management

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

- Manage a portfolio of community-wide improvement initiatives and review progress of each initiative. Examples of community-wide initiatives include:
  - Create universal handover forms/formats to improve communication and coordination of patient care among all clinical settings;
  - Develop a common evidence-based patient education approach in all clinical settings (e.g., health literacy strategies, www.teachbacktraining.com);
  - Create universal teaching materials for the most common clinical conditions for use in all clinical settings; and
  - Create universal self-management tools to be used in all clinical settings to support patients and family caregivers.
- Facilitate collaboration along with payers and post-acute care providers to determine
  eligibility criteria for intensive care management and how to determine the clinical
  provider who is "in charge of coordinating care" for various patient populations (Care
  Transitions Intervention, APN Transitional Care, HF Clinic, Patient-Centered Home,
  Evercare, etc.).

### **Health Information Exchange and Shared Care Plans**

Health information technology (HIT) and the systems to enable exchange of electronic information within and across settings in a community (i.e., interoperability) can dramatically affect the coordination and communication of information among providers and between providers and patients. While hospitals have had electronic systems to support financial and management systems for a long time, few have electronic clinical information systems that support quality of patient care.<sup>39</sup> Other settings across the continuum of care have only recently begun to adapt and implement HIT systems that include clinical information.<sup>41</sup> Recent national initiatives — such as the Health Information Technology for Economic and Clinical Health (HITECH) Act (P.L. 111-5) that has as its goal the adoption of HIT in hospitals and office practices around the country — are helping to accelerate the use of HIT more broadly across the health care system. Some insights about the current and potential impact of HIT on the components of IHI's Roadmap for Improving Transitions in Care after Hospitalization and Reducing Avoidable Rehospitalizations (Figure 1) are addressed in this section.

#### **Transition from Hospital to Home**

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

#### **Transition to Community Care Settings**

The ability of clinicians and staff in skilled nursing facilities, home health care, and primary care practices to effectively receive the patient following a hospitalization depends on their having access to information about the patient's course of treatment and the care plan developed during the hospitalization. The timely transmission of the discharge summary is often a key roadblock that can be addressed through shared access to the patient's medical record and the key recommendations for follow-up care by the discharging physician.

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

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

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

#### **Supplemental Care for High-Risk Patients**

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

In spite of the potential that HIT has to affect improvements in transitions in care, there are a number of limitations of current HIT systems, including the lack of connectivity between different HIT systems in different clinical settings. Even within a single care setting such as a hospital, the systems for data exchange are not transparent and do not encompass all of the needed elements. Most hospitals have fragmented care plans by discipline (different ones for MDs, RNs, pharmacists, etc.). While the HITECH Act also provides funding to support the state and regional efforts that will enable the transfer of electronic data across all settings and sites of care, fully functioning systems are not widespread. The Office of the National Coordinator has released a Request for Information (RFI) on Governance of the Nationwide Health Information Network to a common set of "rules of the road" for privacy, security, business and technical requirements that will help create the necessary foundation to enable the nation's electronic health information exchange capacity to grow.<sup>40</sup>

In addition to the technical issues that need to be solved, there are other challenges that need to be addressed in order to fully maximize these systems to help providers and patients improve transitions, including better partnership between IT vendors and quality

improvement experts and overcoming the conflict between vendor business strategies and the needs of providers within and/or across regions.

## IV. Infrastructure and Strategy to Achieve Results

## Step 1. Executive Leadership

The Executive Sponsor links improving transitions in care and reducing readmissions to the strategic priorities of the organization. This sponsor provides oversight and guidance to the improvement teams' work. Depending on the size and organizational structure of the hospital or health care system, typical Executive Sponsors may include Chief Executive or Chief Operating Officers, Patient Safety Officers, Medical Directors, Nurse Executives, or Community Leaders.

When reducing readmissions and improving transitions are a strategic priority, the chances of achieving lasting results increase. The strategic questions below may help.

- In what way is reducing the hospital's readmission rate a strategic priority? How
  can this be leveraged to achieve multistakeholder commitment?
- What initiatives or other projects to reduce readmissions are already underway or planned? How are they aligned?
- What resources and expertise in quality improvement and data analysis will support improvement efforts?
- How will leaders provide oversight and accountability for the improvement projects?
- How might competing commitments influence this work?

The Executive Sponsor guides breakthrough performance. IHI's white paper *Execution of Strategic Improvement Initiatives to Produce System-Level Results*, contains four components to achieve results:<sup>42</sup>

- 1. Set priorities and breakthrough performance goals;
- Develop a portfolio of projects to support the goals;
- 3. Deploy resources appropriate for the aim; and

4. Establish an oversight and learning system to produce desired change. 42

The Executive Sponsor should select a Day-to-Day Leader who coordinates project activities; helps lead the cross-continuum team; provides guidance to the front-line improvement team(s); and communicates progress to the Executive Sponsor on a regular basis. The Day-to-Day Leader is often a director of nursing or patient care, a director of case management.

## Step 2. Convene or Join a Cross-Continuum Team

A multistakeholder team represents the care continuum including patients and family caregivers, and provides leadership, energy, ideas, and oversight for reducing readmissions and improving transitions. This multistakeholder group co-designs the processes to improve transitions in care. It identifies and builds "sender" and "receiver" relationships for every step of the patient journey across the care continuum. Collectively, team members explore ideal information flow as the patient moves from one setting to the next. Cross-continuum team membership may include:

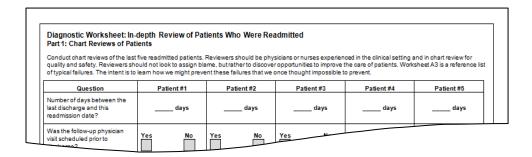
- Patients and family caregivers (ideally these are not retired health care professionals);
- Staff from skilled nursing facilities and long-term care centers;
- Office practice representatives like primary care physicians and specialists;
   nurses or nurse practitioners; or practice administrators;
- Home health nurses and staff;
- Palliative care, hospice nurses and staff;
- Community pharmacists;
- Community social services agencies staff such as case managers or staff from elder services; and
- Hospital staff such as nurse managers, nurse educators, and staff nurses;
   hospital physicians or hospitalists; case managers; pharmacists; discharge planners; or quality improvement leaders.

#### **Step 3. Identify Improvement Opportunities**

The first cross-continuum or multistakeholder team meets and articulates its aspirations and purpose. It develops a plan to manage the improvement portfolio and clarifies its aim (e.g., to reduce rehospitalizations by 30 percent). Early team tasks include making the human connection and building trust among the membership. Some teams found making flow diagrams of their process, with attention to the intersections, helpful. Others actually began by visiting each other's care sites and observing key processes. Much is learned about what each member does and what they need to do it better. Some teams conducted the diagnostic assessment (see Step 3a, below) on five patients and used the findings as a place to begin learning and improving. A review of historical data like readmission rates, transfers from long-term care centers to hospitals, home health urgent visits or acute care hospitalization data, patient perception data valuable is setting measureable goals.

Step 3a. Review, in-depth, the medical record of the last five rehospitalizations to yield rich information (the Diagnostic Worksheet – Figure 22 – helps make sense of these findings).

Figure 22: Diagnostic Worksheet (Part 1) (How-to Guide Resources, page 124)



Interview five patients recently readmitted (ideally, while they are in the hospital) and
their family members. If possible, interview the same patients whose charts were
reviewed. Next, conduct interviews with community clinicians who know the readmitted
patient (e.g., physicians, nurses in the skilled nursing facility, home health nurses, etc.).
Identify problem areas from their perspective. Transcribe information from these
interviews onto Part 2 of the Diagnostic Worksheet (Figure 23).

Figure 23: Diagnostic Worksheet (Part 2) (How-to Guide Resources, page 126)

	orksheet: In-depth Rev			Community	
Part 2: Interviews with Patients, Family Members, and Care Team Members in the Community  f possible, conduct the interviews on the same patients from the chart review. Use a separate worksheet for each interview.					
	d Family Members:				
How do you thin	you became sick enough to	come back to the hospit	al?		

A Diagnostic Review at St. Luke's Hospital in Cedar Rapids, Iowa, revealed this patient story:

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.

The diagnostic provides the team with the details of the individual patient stories (including family and community context). Kaiser Permanente deepens their understanding of patient experience utilizing video ethnography available at <a href="http://kpcmi.org/news/ethnography/video-ethnography-tool-kit.pdf">http://kpcmi.org/news/ethnography/video-ethnography-tool-kit.pdf</a>.

#### Step 3b. Review data on patient experience and discharge preparations.

Trend the data for the questions below from your organization's Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) patient response data in a time series chart for the entire hospital, by month, for the last 12 months. (Refer to <u>Patient Experience Measures</u>, page 87.) Note that in 2013, CMS added three questions known as the CTM3 – adapted from Dr. Eric Coleman's Care Transitions Program (<u>www.caretransitions.org</u>); these are questions 23, 24, and 25, below. If you do not yet have 12 months of data for these questions/statements, you can begin to trend what you have.

- "Did hospital staff talk with you about whether you would have the help you needed when you left the hospital?" (HCAHPS Q19)
- "Did you get information in writing about what symptoms or health problems to look out for after you left the hospital?" (HCAHPS Q20)
- "During this hospital stay, staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left." (HCAHPS Q23)
- "When I left the hospital, I had a good understanding of the things I was responsible for in managing my health." (HCAHPS Q24)
- "When I left the hospital, I clearly understood the purpose for taking each of my medications." (HCAHPS Q25)

# Step 3c. Trend 30-day all-cause readmissions and patients admitted to observation status in time series charts.

Collect historical data and display monthly all-cause readmission rates in a time series chart. Display data for the last 12 months, if possible. Consider segmenting readmissions rates by

patients with certain diagnoses like heart failure. Additional outcome measures are recommended.

#### **Recommended Readmissions Measures**

- 30-day all-cause hospital readmissions
- 30-day all-cause readmissions for a population of focus
- The number or percent of patients admitted for observation status discharged within 30 days
- Count of patients who return to the hospital within 30 days of a discharge (inpatient status plus observation status)

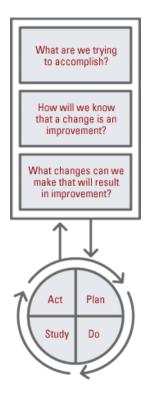
#### **Step 4. Use the Model for Improvement**

Developed by Associates in Process Improvement, the Model for Improvement (Figure 24) is a simple yet powerful tool for accelerating improvement that has been used successfully by hundreds of health care organizations.

#### The model has two parts:

- Three fundamental questions that guide improvement teams to: 1) set clear aims;
   2) establish measures that show if changes lead to improvement; and 3) identify changes that are likely to lead to improvement.
- The Plan-Do-Study-Act (PDSA) cycle to conduct small-scale tests of change in real work settings — by planning a test, trying it, observing the results, and acting on what is learned. This is the scientific method, used for action-oriented process improvement.

Figure 24: The Model for Improvement



Learn more about the Model for Improvement at <a href="www.ihi.org">www.ihi.org</a>.

#### Question 1: What are we trying to accomplish?

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

#### Example aim statements:

- 1. St. Elsewhere Hospital will improve transitions home for all patients as measured by a decrease in the 30-day all-cause hospital readmission rate from 12 percent to 8 percent or less within 24 months.
- 2. We will start our improvement work with patients on 4W and 5S. We will expect to see a decrease in the readmission rates for patients discharged from those units of at least 10 percent within 12 months.
- Shady Oaks Hospital will improve transitions home for all heart failure patients as measured by a reduction in unplanned 30-day all-cause readmission rates for heart failure patients (decreasing the rate from 25 percent to 15 percent or less in 18 months).

For more on setting aims, please refer to:

www.ihi.org/knowledge/Pages/HowtoImprove/ScienceofImprovementSettingAims.aspx.

#### How to Select Pilot Units or a Pilot Population

Select one or two medical/surgical units where most readmissions occur or start with a patient population with a large percentage of readmissions (e.g., heart failure, COPD, or patients being discharged to SNFs).

#### **How to Form an Improvement Team**

Front-line improvement team(s) vary from hospital to hospital. Ideally, involve individuals who actively assess patients, teach and facilitate patient education, communicate essential information during handovers to the next care setting, and arrange post-hospital care follow-up. Front-line improvement team(s) will initially test the four Key Changes from section II on the unit(s). A typical front-line improvement team includes:

- A Day-to-Day Leader for each pilot unit who will drive the work on their respective unit(s);
- Patients and family members;
- Physician champions (this person may be a cardiologist, intensivist, hospitalist, primary care physician, or specialist, depending on the specific unit selected);
- Nurse manager, staff nurses, case managers, clinical nurse specialists, and nurse educators;
- Social workers and/or discharge planners;
- Pharmacists; and
- Clinicians and staff from community settings.

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

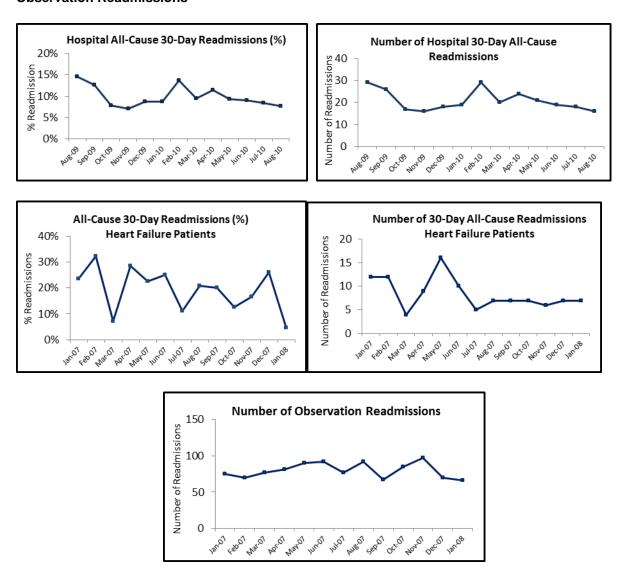
Data to reduce readmissions and rehospitalizations is best for learning not judgment.

Outcome, process, and balancing measures inform improvement. Outcome measures directly relate to the aim — in this case, to reduce readmissions or rehospitalizations. Process measures reflect how work gets done around the key changes. Balancing measures help

ensure that we are not negatively affecting other parts of the system. When data is displayed in a time series graph or in a run chart, trends and improvement are easy to observe (Figure 25).

A comprehensive list of all of the measures can be found in the <u>System Measures Section</u> on page 66.

Figure 25: Example Run Charts for Outcome Measures for Readmission, Patient Experience, and Observation Readmissions

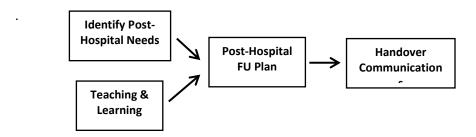


Question 3: What changes can we make that will result in improvement?

Select the changes needed to bring about improvement from among the Key Changes outlined in section II. The categories of the Key Changes are listed below.

The key changes represent the temporal journal of a patient hospital stay. First, the patient is admitted and the key change for avoiding a subsequent readmission is an assessment of the specific patient needs at discharge. The second key change occurs during the hospital stay and involves using Teach Back to improve teaching and assess patient or the designated learners understanding. The third key change is preparing for follow up after discharge. The final change provides the person who receives the patient information needed. All changes should be reliably implemented and scaled up across the hospital to reduce readmissions.

Figure 26: Flowchart of Key Changes



#### **Using Plan Do Study Act Cycles for Learning and Improvement**

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

#### Why Test Changes?

- To increase your belief that the change will result in improvement;
- To decide which of several proposed changes will lead to the desired improvement;
- To evaluate how much improvement can be expected from the change;
- To decide whether the proposed change will work in the actual environment of interest;
- To decide which combinations of changes will have the desired effects on the important measures of quality;

- To evaluate costs, social impact, and side effects from a proposed change; and
- To minimize resistance upon implementation.

## **How to Test a Change**

A first test of change usually happens on a small scale (e.g., using Teach Back with one nurse or one patient or for one day). Use a Plan-Do Study-Act (PDSA) Worksheet like the one below and predict what will happen as a result of trying something different. Observe the results, learn from them, and continue to the next test. Use iterative PDSA cycles to test under a variety of conditions. This improves the team's belief that the change will work reliably when implemented. See the PDSA Worksheet (Figures 27 and 28).

Figure 27: PDSA Worksheet (How-to Guide Resources, page 124)

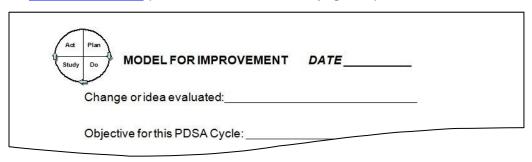
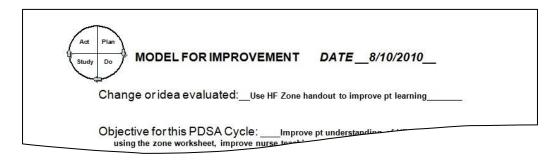


Figure 28: Example Completed PDSA Worksheet (How-to Guide Resources, page 126)



Most changes require a series of successive tests before implementation. Testing should include a variety of conditions, (i.e., adding a variety of types of patients and families), or testing on different shifts, on the weekdays and on the weekends, when short-staffed, when well-staffed, on days with many admissions, few admissions, etc. The point is to learn as much as possible to increase the likelihood the change is an improvement prior to implementation

and to create a process that is reliable as possible. An iterative series of PDSA cycles that involved learning about Teach Back are outlined below.

## **Example of Iterative PDSA Cycles to Improve Patient Understanding Using Teach Back**

- Cycle 1: One nurse, on one day, tests whether using Teach Back with one
  patient who has heart failure (HF) helps the patient learn the reasons to call the
  physician for help after discharge. The nurse learned that materials were
  confusing to the patient.
- Cycle 2: Nurse revises the teaching materials to identify key points by circling them for the patient on the teaching handout. The nurse runs a second PDSA cycle with the same patient the next day and the patient can Teach Back the signs and symptoms, when and how to call his doctor.
- Cycle 3: The nurse expands Teach Back to two more patients, one has a designated learner, his daughter.
- Cycle 4: The nurse tries a cycle of setting a learning appointment with a designated learner. This cycle is later abandoned due to complexity.
- Cycle 5: Nurse expands Teach Back to all patients with heart failure and spreads out the Teach Back sessions over several days during the stay.
- Cycle 6: Nurse expands Teach Back to all her patients and designated learners.
- Cycle 7: Teach Back is introduced to the weekend staff and two nurses from each shift are trained. Nurses begin sharing results of learning in shift report to coordinate who teaches what.
- Cycle 8: The nurse manager observes that staff struggle with how to ask the patients to Teach Back and develops 3 alternative scripts for testing.
- Cycle 9: Staff try the scripts and like two of the three, they adopt those two.

## **Suggestions for Conducting PDSA Cycles**

- Keep tests small; be specific.
- Make a prediction about what will happen if the tests succeed.
- Each test informs the next.
- Expand test conditions to determine whether a change will work under a variety of conditions:
  - Different times of day (e.g., day and night shifts, weekends, holidays)
     when the unit is adequately staffed;
  - At times of staffing challenges; or
  - Different types of patients (those with lower health literacy, non-English speaking patients, short stay or long stay patients).
- Collect sufficient data to evaluate whether a test has promise, was successful, or needs adjustment. Compare data to findings to learn more and design future tests.
- Continue PDSA cycles of learning and testing to improve process reliability.

#### Test to Increase Process Reliability

Reliability is a failure-free operation over time so that processes produce desired results every time, for every appropriate patient. As PDSA cycles ramp up, and are ready for implementation, make sure to precisely specify the work, i.e., who does what, when, how, where, etc. To make processes more reliable, make use of human factors principles (e.g., build on existing habits, use checklists to avoid relying on memory, foolproof the process so that it is impossible to do the wrong thing, use standard protocols and training). To increase reliability, for example, consider auto-reminders for Teach Back and documentation. Another method to determine process reliability is to interview staff about how they do particular work, like patient teaching and the use of Teach Back. If the responses vary, this may reveal a lack of reliability in how the work is done. Use peer observers and coaches help to build new competencies among the staff and develop needed reliability.

Make sure there is a process in place that identifies process failures, e.g., a patient is ready for discharge but never received any Teach Back during their stay, or a patient cannot Teach Back important aspects of their self-care and nothing was changed in the discharge plan.

Learn where failures occur and then use problem-solving to design solutions, redundancies, or remedies if they occur. This is especially useful when patients have been readmitted.

<u>Improving Reliability of Teach Back</u>: When redesigning your patient education processes to teach patients about home-going instructions (as described in the example PDSA cycles above), work with staff who conduct the tests to precisely describe the work. The following questions may help improve reliability and specify work. Below is an example of how to customize the questions around Teach Back.

- Who will do it (be specific, e.g., include the name of the nurse assigned to the patient)?
- What will they do (e.g., use Ask Me 3<sup>™</sup> framework to organize teaching for all
  patients and each patient is asked (in a non-shaming way) to describe in their
  own words what was learned)? Learning is documented in the patient's record so
  that at discharge, details on the patient's ability to teach back the key points can
  be transferred to the next site of care.
- When will they do it (e.g., during second hourly rounding of shift)?
- Where will they do it (e.g., in the patient's room)?
- How do they do it (include tools that are used, e.g., Teach Back documentation tool kept in patient's chart)?
- How often will they do it (e.g., once each day)?
- Why should they do it (e.g., to enhance learning and identify patients who are at risk for problems while caring for themselves post-hospital)?

Continue to test the process under a variety of conditions (e.g., different nurses, different kinds of patients). Adapt the change iteratively until it optimally meets the needs of both patients and staff and a high level of reliability is achieved (i.e., the process works as designed at least 95 percent of the time).

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

#### Learning from a failed test:

The nurses used the Ask Me 3<sup>™</sup> framework and Teach Back with all patients. A nurse caring for a patient with chronic depression was unsure about the relevant Teach Back questions to assist her with patient education. The nurses, physicians, and social workers met to delineate the relevant Teach Back questions for patients with mental health conditions and redesigned education.

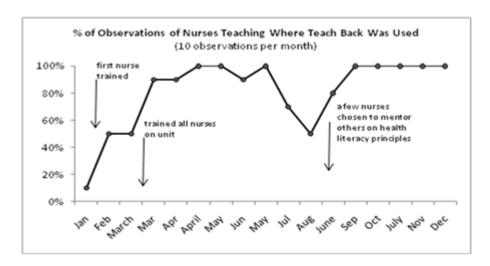
After successful testing under varying conditions with desired results, document the process so there is no ambiguity and all involved can articulate the exact same steps in the process.

#### **Use Data, Displayed Over Time, to Understand Progress**

Use data to understand if the changes you are making result in improvement. For example, display in a time series graph the percentage of teaching opportunities where nurses use Teach Back. Annotate graphs to note when specific changes were tested and implemented. Continue to collect and display this data to see whether your changes result in improvement(s). Augment quantitative data with information from asking patients about their experience (consider using the <u>Diagnostic Worksheet</u>, How-to Guide Resources, page 124).

Track whether new and improved processes are executed as expected with process measures. Learn whether and how specific changes work as planned. Figure 29 shows an example of an annotated time series graph for a process measure for *Provide Effective Teaching and Facilitate Enhanced Learning*. The annotations show when specific changes were tested or implemented.

Figure 29: Example Time Series Graph for Process Measure



#### **Institute for Healthcare Improvement**

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

When data suggest a lack of process reliability, ask the people who do the job what barriers they face. Identify opportunities to execute the new processes more reliably. Avoid blaming staff who do the work. Assume the problem is from poor process design. Work with the team to fix it. For example, if the team observes that nurses are not using Teach Back, the team should ask nurses about barriers to using Teach Back and then work to remove those barriers to improve the likelihood Teach Back will be used.

Note, for example, how the data in the graph above (Figure 29) enables the team to see when performance declined, and to test new interventions to improve reliability. Share data with unit staff, physicians, and senior leaders. Reflect on lessons learned from both successful and unsuccessful tests of change.

#### Step 5. Implementation, Scale-up, and Spread

#### Implementation of Changes

After testing a change on a small scale, learning from each test, and expanding tests to cover a wide range of conditions, the team is ready to implement a change. Implementation occurs when the staff are ready for the change, when the degree of certainty that the change is an improvement is high, and when the cost of implementation is low or the change can easily be removed or redone. The change is then ready to be made permanent and routine. This usually requires revisions to written policies, hiring, training, compensation, electronic work aides in the EMR, equipment, and other aspects of the organization's infrastructure that were not engaged in the testing phase. Pay attention to communication (i.e., publicizing the benefits of the change), documenting improvement, as well as keeping in contact with the pilot team to support it during implementation.

Implementation Example: During the testing process, a few nurses learn Teach Back. Once the processes and support materials were adapted so that these nurses could teach the identified learners effectively over 90 percent of the time, those processes can be implemented across the unit. Making these processes the default system (i.e., the way the work is done rather than the way a few nurses do the work from time to time) requires a training system for all nurses currently on the unit, and changes to orientation programs for new nurses. Scaling up the change across the hospital might require changes to an IT documentation system. Communication to all staff about new expectations for teaching and learning might be developed to generate interest in implementing the redesigned process in other parts of the hospital (e.g., in other units or service lines) or with other disciplines (like physicians, or pharmacists) in preparation for spread.

During implementation, attend to social aspects of the change as well as the technical infrastructure. Leaders need to communicate not only the *what*, and the *why*, but also the *how* of the change, and address questions and concerns. It is common for processes to work reliably during testing and less reliably, temporarily, during implementation because a larger group, some unfamiliar and/or unsympathetic with the purpose, must implement a change. <sup>47</sup> There may be resistance, or simply confusion. It may take some cycles of testing to put in place an effective infrastructure to support the change(s). After implementation, continue to monitor whether processes are reliable and act on that information to adapt the processes and the related infrastructure to support the change. Make it easy to do the right thing, and hard to do the wrong thing.

#### **Tips for Sustaining Improvements**

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

**Avoidable Rehospitalizations** 

## Planning for Scale-up of Changes

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

An important leadership consideration is to ensure staff have adequate time and resources to adopt the changes as well as support overcoming the barriers that inhibit scare up.

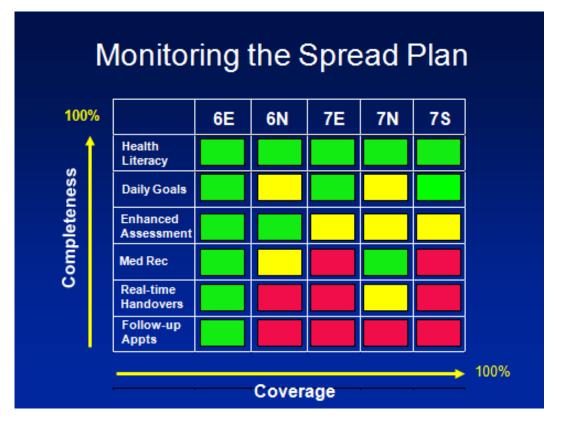
### **Spreading Changes**

Leaders should plan for spreading the improvement developed in the pilot population or unit during the early stages of the initiative. After successful implementation of the Key Changes in the pilot unit or with a patient population, leaders develop a spread plan. Even though the changes have been tested and implemented, spread efforts benefit from testing and adaptation (using PDSA cycles) in new patient populations or organizations.

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

A key responsibility of leaders is to develop a plan and timetable for spread and then to measure and monitor progress. Figure 30 shows an example of a tool to monitor spread of changes. This tool allows a leader to visualize spread progress of each change and the spread of changes across the locations.

Figure 30: Tool to Monitor Spread



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

#### Books and articles:

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

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

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

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

#### Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

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

#### Web tools and resources:

On Demand Presentation: An Introduction to the Model for Improvement. Institute for Healthcare Improvement. Available at:

www.ihi.org/offerings/VirtualPrograms/OnDemand/ImprovementModelIntro/Pages/default. aspx.

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

## **V. System of Measures**

Outcome Measures: Readmissions				
Measure	Description	Numerator	Denominator	Data Collection Strategy
30-Day All-Cause Readmissions	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, rehab, planned surgery)	The number of discharges in the month Exclusions: Labor and Delivery, transfers to another acute care hospital, patients who die before discharge	Write a report to run no sooner than 31 days <u>after</u> the <u>end</u> of the measurement month. This report will:  1a. Pull all the discharges in the measurement month  1b. Remove exclusions (transfers to other acute care, deceased before discharge, Labor and Delivery)  The number of discharges after you remove the exclusions is your denominator (or "index discharges").  2a. Through the unique medical record identifier, identify those (index) discharges that resulted in readmissions within 30 days of the discharge  2b. Remove exclusions (planned readmissions like chemotherapy, radiation, rehab, planned surgery, renal dialysis)  The number of (index) discharges that resulted in readmissions within 30 days will be your numerator.
Readmissions Count	Number of readmissions (numerator for % readmissions)	N/A	N/A	Use the numerator specified in the measure above
30-Day All-Cause Readmissions for a Specific Clinical Condition or pilot population	Percent of discharges with a specific clinical condition or pilot population readmitted for any cause within 30 days of discharge	Number of discharges with a specific clinical condition or pilot population readmitted for any cause within 30 days of discharge Exclusion: Planned readmissions (e.g., chemotherapy schedule, rehab, planned surgery)	Number of discharges in the month with the specific clinical condition or pilot population  Exclusions: Labor and Delivery, transfers to another acute care hospital, patients who die before discharge	See above

Outcome Measures: Patient Experience				
Measure	Description	Numerator	Denominator	Data Collection Strategy
HCAHPS Discharge Question 19	"Did hospital staff talk with you about whether you would have the help you needed when you left the hospital?"	Number patients surveyed in the month who answered, "yes"	Number of surveys completed in the month for the hospital with an answer for this question	Use your organization's HCAHPS data
HCAHPS Discharge Question 20	"Did you get information in writing about what symptoms or health problems to look out for after you left the hospital?"	Number patients surveyed in the month who answered, "yes"	Number of surveys completed in the month for the hospital with an answer for this question	
HCAHPS Care Transitions Measures Question 23 (adopted from CTM3 question)	"During this hospital stay, staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left."	Number patients surveyed in the month who answered agree or strongly agree	Number of surveys completed in the month for the hospital with an answer for this question	Note that the CTM 3 (questions 23-25) have been newly incorporated into HCAHPS. CMS has not yet indicated how they plan to analyze this data.
HCAHPS Care Transitions Measures Question 24 (adopted from CTM3 question)	"When I left the hospital, I had a good understanding of the things I was responsible for in managing my health."	Number patients surveyed in the month who answered agree or strongly agree	Number of surveys completed in the month for the hospital with an answer for this question	
HCAHPS Care Transitions Measures Question 25 (adopted from CTM3 question)	"When I left the hospital, I clearly understood the purpose for taking each of my medications."	Number patients surveyed in the month who answered agree or strongly agree	Number of surveys completed in the month for the hospital with an answer for this question (excluding those with the response "I was not given any medication when I left the hospital")	

Balancing Measures				
Measure	Description	Numerator	Denominator	Data Collection Strategy
30-Day All-Cause Readmission to Observation Status	Percent of patients readmitted to observation status within 30 days of a hospital discharge	Number of discharges with readmission to observation status for any cause within 30 days of discharge	The number of discharges in the month Exclusions: Labor and Delivery, transfers to another acute care hospital, patients who die before discharge	Write a report to run no sooner than 31 days after the end of the measurement month. This report will:  1a. Pull all the discharges in the measurement month  1b. Remove exclusions (transfers to other acute care, deceased before discharge, Labor and Delivery)  The number of discharges after you remove the exclusions is your denominator (or "index discharges").  2. Through the unique medical record identifier, identify those (index) discharges that resulted in admission to observation status within 30 days of the discharge  The number of (index) discharges that resulted in observation status admission within 30 days will be your numerator.
Count of Observation Admissions within 30 Days of Hospital Discharge	Number of patients admitted to observation status within 30 days of a hospital discharge	Number of discharges with readmission to observation status for any cause within 30 days of discharge	NA	Use the numerator specified in the measure above

Balancing Measures					
Measure	Description	Numerator	Denominator	Data Collection Strategy	
Emergency Room Visits within 30 Days of Hospital Discharge	Percentage of patients who have ED Visit within 30 days of hospital discharge	Number of patients with ED visit within 30 days of hospital discharge	The number of discharges in the month Exclusions: Labor and Delivery, transfers to another acute care hospital, patients who die before discharge	Write a report to run no sooner than 31 days after the end of the measurement month. This report will:  1a. Pull all the discharges in the measurement month  1b. Remove exclusions (transfers to other acute care, deceased before discharge, Labor and Delivery)  The number of discharges after you remove the exclusions is your denominator (or "index discharges").  2. Through the unique medical record identifier, identify those (index) discharges that resulted in an ER Visit within 30 days of the discharge The number of (index) discharges that resulted in ER visits within 30 days will be your numerator.	

Process Measures					
Measure	Description	Numerator	Denominator	Data Collection Strategy	
Patient and Family Involvement in Identifying Post-Discharge Needs	Percent of admissions where patients and family caregivers are included in identifying post-discharge needs  Guidance: In order to determine whether patients and families were involved in discharge planning, you will need to define a process you want your staff to use. See change 1A for ideas.	Number of admissions in sample where patients and families were included in identifying post-discharge needs	Number of admissions in the sample	<ul> <li>Option 1: Review charts of 10 to 20 patients discharged from the pilot unit: 2 to 5 per week for 4 weeks a month</li> <li>Option 2: Build data collection into discharge process – i.e., at discharge, review record to determine if patients and families were included in identifying post-discharge needs</li> </ul>	
Patient Teach Back	Percent of observations of nurses teaching patient or other identified learner where Teach Back is used to assess understanding  This data can be measured for other disciplines (e.g., physician, dietary, pharmacy, etc.) as necessary.	Number of observations of nurses where Teach Back is used to assess understanding	Number of observations of nurses teaching	Observe 10 to 20 teaching opportunities: 2 to 5 per week for 4 weeks a month until the process appears effective and reliable.	
Teach Back Communication	Percent of discharges where patient/family understanding of Teach Back is documented in the electronic medical record	Number of discharges where patient/family understanding of Teach Back is documented in the electronic medical record	Number of discharges in the sample	Retrieve from the Electronic Record.	

Process Measures					
Measure	Description	Numerator	Denominator	Data Collection Strategy	
Timely Handover Communication	Percent of time critical information is transmitted at the time of discharge to the next care site or person continuing care (e.g., home health, long-term care facility, rehab care, physician office, or carer at home)  Guidance: In order to determine whether critical information has been transmitted you will need to know what you mean by critical information. We recommend you work collaboratively with your receivers to make this determination. See change 4B for ideas.	Number of discharges in the sample where critical information is transmitted at the time of discharge to the next care site or person continuing care (e.g., home health, long-term care facility, rehab care, physician office, or carer at home)	Number of discharges in the sample	<ul> <li>Option 1: Review charts of 10 to 20 patients discharged from the pilot unit: 2 to 5 per week for 4 weeks a month</li> <li>Option 2: Build data collection into discharge process – for example, collect copies of the transfer forms and count them up, or keep a tally sheet</li> </ul>	
Patient-Friendly Post- Hospital Care Plan	Percent of patients discharged who receive a customized post-hospital care plan written in patient- friendly language at the time of discharge	Number of patients in the sample who receive a customized post-hospital care plan written in patient-friendly language at the time of discharge	Number of patients in the sample	<ul> <li>Option 1: Review charts of 10 to 20 patients discharged from the pilot unit: 2 to 5 per week for 4 weeks a month</li> <li>Option 2: Build data collection into discharge process – for example collect copies of the care plans and count them up, or keep a tally sheet.</li> </ul>	

Process Measures					
Measure	Description	Numerator	Denominator	Data Collection Strategy	
Post-Hospital Care Follow- up	Percent of patients discharged who had a follow-up visit scheduled before being discharged in accordance with their level of assessed risk	Number of patients in the sample who had a follow-up visit scheduled before being discharged in accordance with their level of assessed risk	Number of patients in the sample	<ul> <li>Option 1: Review charts of 10 to 20 patients discharged from the pilot unit: 2 to 5 per week for 4 weeks a month</li> <li>Option 2: Build data collection into discharge process – i.e., at discharge, review record to determine if appointments were made in accordance with risk assessment</li> </ul>	

Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

## **VI. Case Studies**

St. Luke's Hospital	p. <u>74</u>
University of California San Francisco	p. <u>94</u>

#### St. Luke's Hospital

St. Luke's Hospital (SLCR), part of UnityPoint Health, is a private hospital in Cedar Rapids, lowa. St. Luke's is licensed for 500 beds and has more than 17,000 admissions. St. Luke's has Joint Commission Disease-Specific Certification in Advanced Heart Failure, Stroke, Palliative Care, and Total Joint.

In 2006, St. Luke's joined the IHI Transition to Home Collaborative. Prior to the IHI work, a heart failure (HF) team had been chartered (in 2001) and had already implemented the following:

- Standardized care through order sets;
- Patients identified daily via BNP reports;
- Outpatient heart failure education class; and
- Scheduled follow-up physician office visit for the patients prior to discharge.

Following the collaborative kick-off, the team expanded to include a home care representative, a family member of a HF patient, a long-term/skilled care representative, and an outpatient physician clinic representative. This enhanced team, more broadly representing the patient's continuum of care, has played a major role in developing and testing changes to improve transitions. The St. Luke's Patient and Family Advisory Council formed in 2007, and has provided valuable insight to the team in the design of the ideal transition to home.

The cross-continuum team continually makes improvements by testing and implementing changes. Individual patient, family, and caregiver experiences are aggregated to make changes for the larger population. Readmissions are monitored, and failures are reviewed by the cross-continuum team to identify opportunities for improvement.

#### Key Changes Implemented

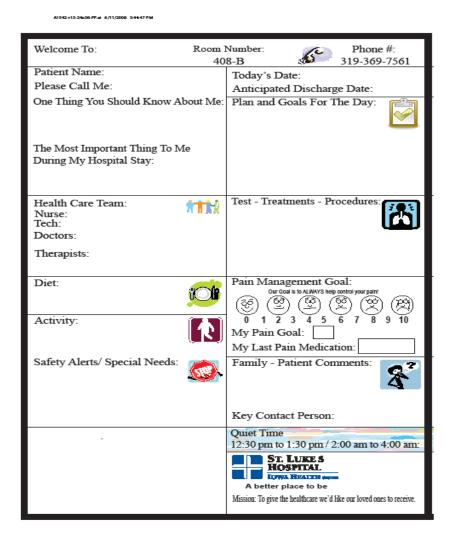
1. Enhanced Assessment of Post-Hospital Needs

The patient care units conduct bedside reports to involve the patient and family caregivers as partners in care. In addition, a daily discharge huddle is facilitated with the RN caring for the patient, the charge nurse, unit-based case manager, and social worker.

#### Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

The daily huddle provides an opportunity to review the plan for the day, anticipate discharge needs, and determine what it will take to get the patient home safely. Daily goals made with the patient and family are written on the whiteboard in the room. A section of the whiteboard is reserved for the patient or family to write questions for the care team. The whiteboard (24x36 inches – see picture below) was developed by the Patient-Family Advisory Council and has been adopted by all medical/surgical areas.

During the admission process, the patient is asked who they would like to have present while discharge information is discussed. This person may be identified on the whiteboard. The hospital employs a dedicated admission nurse team to go to the patient in the Emergency Department or the patient's assigned inpatient bed to perform the medication reconciliation and patient history. These nurses work closely with the clinics, home care agencies, and retail pharmacists to put together a home medication list for the hospital providers to work from.



<u>Key Learning to Date</u>: The team at SLCR learned that building relationships with their patients helped them to discover more critical information about their patients' and families' needs and fears about going home. The hospital initiated a "Take 5" program where nurses visit informally with the patient each day with the purpose of connecting on a personal basis to build relationships and discover needs, wants, fears and barriers.

#### 2. Effective Teaching and Facilitate Enhanced Learning

The cross-continuum team revised the patient education processes and materials to incorporate health literacy concepts and to ensure that the same messages are given across the continuum, i.e., in the hospital, with home care, and in skilled nursing settings. Written materials were redesigned to incorporate only the "need to know" concepts. The

team solicited feedback from patients and families during the testing of draft materials as well as through focus groups.

Teach Back was incorporated into the patient education standards at several key times; at the patient's bedside during their hospital stay; during the 24 to 48 hour post-hospital follow-up visit by home health; and in the post hospital follow-up.

In 2007, the team noticed variation in staff skills and in the reliability of use of Teach Back. As a result, they developed a nurse competency validation on health literacy and Teach Back that includes a demonstration video and interactive role play. This includes exercises using Teach Back with structured observation and peer-to-peer critique on the key components of Teach Back (e.g., avoiding the phrase "do you understand?"). Teach Back instruction is embedded in new nurse orientation and the nurse residency program. Teach Back is encouraged as part of the staff's daily practice for checking patient understanding of therapy treatments, medications, use of call lights, and validation of staff-to-staff communications during a transfer.

Specified Teach Back questions (the "need to know" elements) have been tested and implemented for core populations: MI, Heart Failure, Stroke, CAB, Stroke and Total Joints. Patient teaching documentation in the Electronic Medical Record (EMR) is set up to address the Teach Back topics, and documentation captures the Teach Back results.

Patient Educational packets are identified with a title page indicating the disease process. On the back side of the front cover are Teach Back questions and answers for the specific disease process. This has two benefits:

- The patient and family are aware of what has been identified as important points to help them manage in their self-care and are there as a reference for them.
- The Teach Back questions and answers are readily available to the nurse for her to work from. It reminds the tenured nurse of the priorities for teaching and is a great reference for a new nurse to work from as they learn the standardized process.

The following are elements from the Heart Failure Education packet:

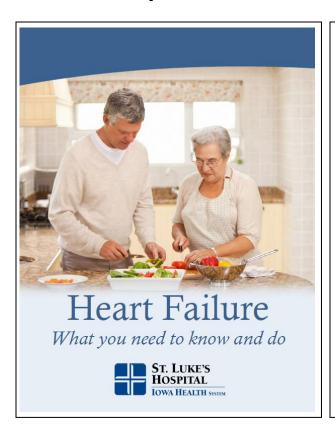
Title page and second page with Teach Back questions and answers.

#### Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

- 4x6 magnet with Warning Signs and Symptoms of Heart Failure.
- Your Low Sodium Eating Plan.
- A 12-month calendar.
- Red, Yellow, Green Action Plan.

If you have one or m of these symptoms:	ore
<ul> <li>Weight gain of 3 pour</li> </ul>	inds in 1 day or
<ul> <li>Weight gain of 5 pour more in 1 week</li> </ul>	inds or
<ul> <li>More shortness of br</li> </ul>	eath
<ul> <li>More swelling of your legs or stomach</li> </ul>	r feet, ankles,
<ul> <li>Feeling more tired –</li> </ul>	no energy
<ul> <li>Dry, hacking cough</li> </ul>	
<ul> <li>Harder to breathe wh</li> </ul>	nen lying down
<ul> <li>Chest pain</li> </ul>	
Call doctor	
at	

## Example of Heart Failure Packet



#### 1. Tell me about your water pill

How often do you take it?

What is the name of your water pill?

Tell me why you need to take it regularly

Tell me how you take your water pill when you are not at home, such as when you are traveling or going to appointments.

Answer:

You need to take the medicine anyway.

You could alter the time that you take it a little bit, but you must not forget to take it.

2. What weight gain should you report to your doctor?

If you gain 3 pounds in one day or 5 pounds or more in 1 week.

3. How many salty or salty type foods are you eating in a day?

How often do you put salt on your food when you eat or add salt when you are  $\boldsymbol{c}$ cooking your foods?

How often do you eat "instant" foods that come from a can, or a box, like soups,

canned vegetables, macaroni and cheese?

How often do you eat salty foods like ham, lunch meat or snack foods or crackers

Answer: Never

4. What symptoms do you need to report to your doctor?

More shortness of breath

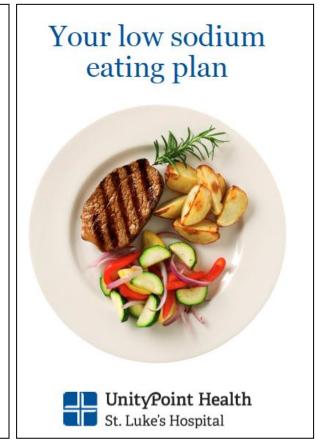
More swelling of your feet, ankles, legs or stomach

Feeling more tired—No energy

Dry, hacking cough

Harder to breathe when lying down

Chest pain





For questions call the St. Luke's Dietitians at 319/369-7777.

# Eat less salty snacks Choose this:

- Unsalted crackers labeled low sodium or hint of salt
- Unsalted nuts
- Unsalted popcorn, air popped or microwaveable
- Unsalted potato or tortilla chips
- Frui
- Raw vegetables



#### Do NOT choose:

- Salted crackers
- Pretzels
- Salted popcorn
- Salted chips
- Salted nuts
- Jerky

## Low sodium eating plan

Sodium is found in nearly every food you eat. Some sodium is natural but the majority is added during processing in the form of salt.

#### Why do you need to limit sodium in your diet?

Sodium acts like a sponge and makes your body hold onto water. Eating too much sodium can cause you to gain weight, make your legs swell and cause water to collect in your lungs.

#### How much sodium can you have each day?

Doctors recommend that you eat less than 2000 mg of sodium each day. This means taking the salt shaker off of your table and reading labels.

#### The first steps:

- Do not use instant foods that come in a can, bag or box. Instead start with fresh foods.
- 2. Do not add salt to foods when you cook or at the
- Use herbs and seasonings, like Mrs. Dash, that are Sodium free.
- Read foods labels. The majority of sodium in the American diet comes from processed foods and restaurant foods.



## Eat less processed food

#### Choose this:

- Swiss cheese
- Milk
- Yogurt
- TV dinners with less than 600mg sodium such as Healthy Choice® Entrees
- · Quick cooking or old fashioned oatmeal
- · Cream of wheat
- · Puffed corn or puffed rice

#### Do NOT choose:

- Cheese
- Instant rice mixes
- Biscuits
- Instant noodle mixes
- Cake mixes
- Pre-made cakes and pies
- Dried soup mixes
- Fast food
- TV dinners that have more than 600mg sodium
- Box Meals such as hamburger pasta meals and macaroni and cheese

## Eat less canned food

Dietary Fiber

#### Choose this:

 Homemade soup made with low sodium bouillon or homemade stock

2,400mg

2.400m

- Fresh or frozen vegetables
- · Tomato juice labeled Low Sodium
- Canned vegetables labeled No Salt Added
- Canned tuna or salmon labeled Low Sodium or Very Low Sodium
- · Canned fruit

## Shopping tips

When grocery shopping look for meals and snacks that fit in your 2000mg Sodium eating plan!

A 2000mg Sodium eating plan:

- · Limit meals to 500mg Sodium
- · Limit snack to 150mg Sodium

#### Comparison Shop

Sodium content can vary amongst brands. You will quickly notice that processed or convenience food items are higher in sodium. Therefore, the majority of your diet should be whole, minimally processed foods.

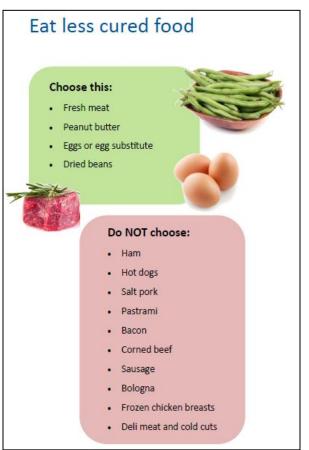
#### Caution for foods labeled reduced-Sodium

Reduced sodium does not mean the product is a low sodium food choice. Some reduced sodium foods like chicken broth, soup and soy sauce still contain a high amount of sodium. Read all food labels for sodium content per serving. Remember that reduced sodium is not the same as low or no sodium.

#### Do NOT choose:

- Canned soups
- · Canned fish such as tuna, salmon or sardines
- · Canned vegetables
- · Canned meat such as chicken, beef or Spam
- · Canned entrees such as pasta or stews
- · Baked beans or pork and beans
- Canned vegetable juice





Example from the 12-month calendar (April 2013)

## *Is it important to get good sleep?*

## April 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9 Heart Failure Workshop 6 to 8:30 pm	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	Limit caffeine have problem	important! Try to slo to improve your sle s falling and staying r relaxing during the	ep. Tell your doctor asleep. You may als	if you so benefit



## **Eating Out**

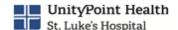
Restaurant food is high in sodium. Some meals contain more than a day's worth of sodium. Eating out should be limited on a low sodium eating plan. If you are eating out, plan ahead and use the following tips:

- Ask questions. Ask about spices, rubs, marinades and finishing sauces, which all
  can be loaded with sodium. If you know where you are going ahead of time call
  the restaurant during their quiet afternoon time and ask to talk to a manager.
- Pick the restaurant. Family restaurants often cook to order and may be better able to accommodate low sodium needs.
- Hold the sauce or gravy. If you must have sauce ask for it on the side. Dip your fork before each bite. You get a taste and are better able to limit the amount used.
- 4. Build a healthy plate. Meat, baked potato and vegetable meals tend to be a better choice when eating out. Talk to the server about preparation of your meat, ask for sauces on the side and hold the cheese sauce on any vegetables.
- Limit condiments. Salsa, barbeque sauce and ketchup are calorie friendly but are loaded with sodium. If you have a sandwich ask for fresh tomato instead of ketchup.
- 6. Skip appetizers. Appetizers add extra calories and sodium.
- Customize your salad. Go easy on the cheese, olives, deli meat and croutons. Ask for salad dressing on the side.
- Ask for nutritional information. Fast food restaurants and some sit down restaurants have nutritional information available upon request.





## **Heart Failure Action**



#### What zone are you in today?

#### You need to do these things

### All Clear - You are feeling well Your symptoms are under control You have: · No shortness of breath Green

- 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

- · Weigh yourself in the morning before breakfast and write it down
- Take your daily medicines as prescribed by your doctor, even if you are feeling well
- Eat low salt food
- Check for swelling in your feet, ankles, legs and stomach
- Balance activity with rest periods

#### Caution – This zone is a warning You need to take action You have:

### Yellow Zone

Zone

- More shortness of breath
- · Weight gain of 3 pounds in one day or a weight gain of 5 pounds or more in 1 week
- More swelling of your feet, ankles, legs, or stomach
- No energy. Feel more tired.
- Dry hacky cough
- Dizziness
- · Feelings of uneasiness, 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

- Call your doctor's office if you have any of the signs or symptoms listed in this yellow zone
- Make sure you have been taking your medicines correctly

#### EMERGENCY – You feel you are in danger

#### Red Zone

#### You have any of the following:

- Struggling to breathe.
- Shortness of breath that does not go away while sitting still
- · Chest pain/tightness in your neck, jaw, throat, shoulders, arms or back
- Have confusion or can't think clearly

Call 911

or

 Go to the hospital Emergency Room

(Do not try to treat this yourself or wait to see if symptoms improve)

#### Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

#### Key Learning to Date:

As more patients and family members participated in helping redesign whiteboards, as well as teaching materials and processes, team members saw the true benefits of co-design with their patient and family partners.

Embedding Teach Back into onboarding education has been successful in demonstrating this part of the nursing delivery system. Having the questions and answers readily available to the patient and family in their educational packet and also available to staff for standardization has helped to streamline the process, and as a result, has met with less resistance from nurses for incorporating this into their daily work.

#### 3. Post-Hospital Follow-up Care Plan

St. Luke's partnered with its home health care agency to provide care coordination and a post-hospital home assessment 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 by providing 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). Often, during the home visit, the nurse can observe social support issues that were evident in the hospital. When these patients are assessed in their home, approximately 15 percent of these care coordination visits have converted to certified home visits when the home care nurse observed the home environment and patient status. During the visits, the nurses use the same patient education tools, such as Teach Back used in the hospital to verify patient understanding of self-care. The home visits are jointly paid for by the hospital and home care agency. Tests of change resulted in this intervention being hardwired in January 2007 for the heart failure population. Currently, approximately 89 percent of patients with heart failure discharged to home receive a home visit, half of which are the complementary care coordination visit. This one-time care coordination visit is set up for other high risk patients on a case-by-case basis.

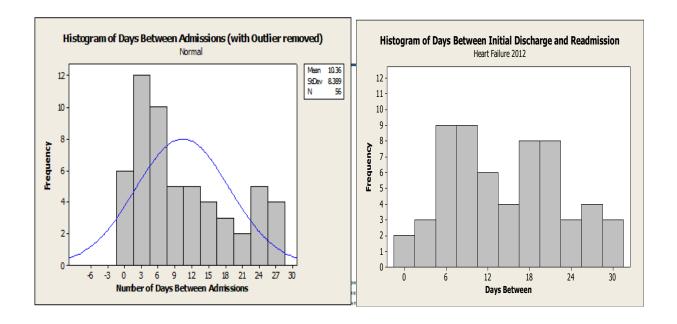
In 2011, St. Luke's opened a hospital-based ARNP-managed heart failure clinic. Partnerships with physician offices resulted in the redesign of the scheduling of post-hospital visits to allow office visits within three to five days, for all heart failure patients, in the hospital-based heart failure clinic. Subsequent appointments are set up within seven days, or according to patient need with the attending physician.

With the learnings from the heart failure population, a seven-day follow-up appointment is now standard practice for all medical patients going home. The staff at St. Luke's schedules the follow-up appointments prior to the patient leaving and notes this on the discharge instructions. Additional high risk clinics have been started for the anticoagulation population and stroke population.

In 2011, St. Luke's Emergency Department (ED) implemented a Consistent Care Program (EDCCP) for patients who visit the ED 12 or more times in 12 months. In the first six months, 103 Care Plans were co-designed by the EDCCP social worker with the patient, and implemented in both the ED and the assigned primary care physician office. The care plans are a communication tool that provide data specific to patient's medical history and current medical needs, and establishes "goals of care" for when a patient comes into the ED. Relationships have been cultivated with numerous community support divisions in order to coordinate services and share information to best serve the patients. Working together, the program has been able to not only better serve the patients by coordinating services, but to effect real changes that improve an individual's quality of life. ED visits for the initial 103 patients in the program were reduced by nearly 70 percent. To date, there are now 260 patients enrolled in the program. Patients who received care plans have had 1,142 fewer ED visits in 2012 compared to 2011. Ninety of the initial 103 patients do not meet the 12 visits in 12 months criteria any more. This case study is featured in *HealthLeaders*, April 2013.

#### Key Learnings to Date:

By the end of the first year of work, the cross-continuum team became a powerful force in building cross-setting relationships facilitating a focus on common aims and values for all parties and making a difference for patients and families. The need for the three- to five-day follow-up appointment was evident from the data that demonstrated many of the readmissions were in the first week of being home. The following two histograms demonstrate the change over time with the post-hospital interventions. In 2006, the majority of the heart failure readmissions were occurring within the first three to six days (mean 10.36). By 2012, with the increase in post hospital follow-up in that first week following discharge, the days between admissions increased (mean 14.5). The histogram days move to the right.



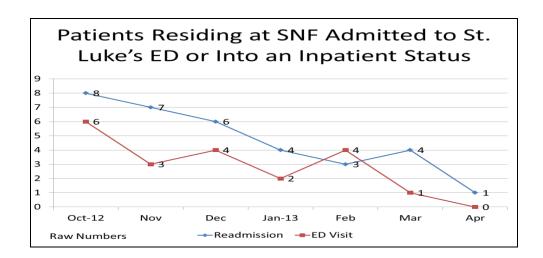
Criteria for certifying patients for home care services can be problematic. Some patients refuse the needed support because they fear being "home-bound." Support in the home can easily unravel, and patient status can quickly deteriorate. Having home care in the home in that first 24 to 48 hours can help assess the patient's need for home care service and support, and help prevent a readmission. Physician Clinic access can impact the ability to get a seven-day follow-up appointment. Working with the clinic to allow some open appointments is important. Working on the high ED utilizers can decrease ED visits and subsequent hospital readmissions.

#### 4. Real-Time Handover

St. Luke's partnered with the hospital's home care agency and two long-term care facilities to standardize and enhance the quality of the handoff communication process, including codesigning the interagency transfer form to meet both the sender's and receiver's needs. St. Luke's provides education to long-term and skilled care RNs, as well as to the CNAs on disease processes and the transition to home. The CNA education has proved especially important since they may observe symptoms in the facilities and are often responsible for observing and reporting the changes in condition.

In June 2012, the hospital went live with a new electronic medical record (EMR). Many of the previously-designed handover tools changed dramatically in response to this change. In

addition, there was a major learning curve with computerized physician order entry (CPOE). In the fall of 2012, after working with the new EMR, the hospital received feedback from community partners on the hardships imposed by the electronic handover tool, and reports that information transfer was suffering. The electronic handover tool also changed the information needing to be communicated during the warm handover. The SNFs were, at this time, implementing ARNP's on staff. The cross-continuum team formed a subgroup with two specific SNFs to work on improving the communication tools, the warm handover to the staff and the ARNPs. Co-designing was facilitated by weekly debriefing conference calls to discuss actual transfers that occurred during the week and identify opportunities for improvement. The result was a better process, implemented within the constraints of the build requirements of the EMR. During this time, the SNFs observed a decrease in both their admissions to St. Luke's Hospital and its emergency department. This cannot all be attributed to revising the electronic handover tools, but the ongoing improvements to communication within the facility influenced this improvement.



At transition, medication reconciliation is a joint physician and nurse responsibility. The physician performs the medication reconciliation, and it populates the discharge instructions. The assigned nurse completes the discharge instructions. A second nurse does an independent double-check comparing the orders to the discharge instructions and looking at the instructions from the patient and family perspective to ensure they are written in patient-friendly format.

In August 2007, a review of readmitted patients helped staff realize the need for referral to palliative care for patients with advanced stages of disease. A full-time physician, social

worker, and various nurses have been added to the program. Discussions between the Palliative Care Medical Director and attending physicians have enhanced their mutual understanding of the program and potential benefits to patients. In late 2008, an ARNP for the outpatient setting was added to the palliative care program in response to repeated requests for assistance with palliative care discussions for patients in the outpatient setting.

Key Learning to Date: Palliative Care services in the hospital and community are needed by a higher percentage of patients. Discharge instructions are a key piece of the discharge process, and it takes several views to ensure all crucial points are identified. The second independent check has been an important step to that safe transition for the patient and family.

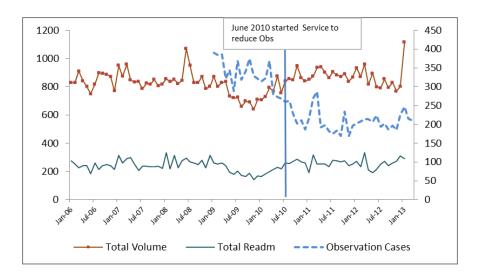
Co-designing with community partners and listening to the information they need, and the order in which they need it, can help ensure a smooth transition.

#### Outcome Measures:

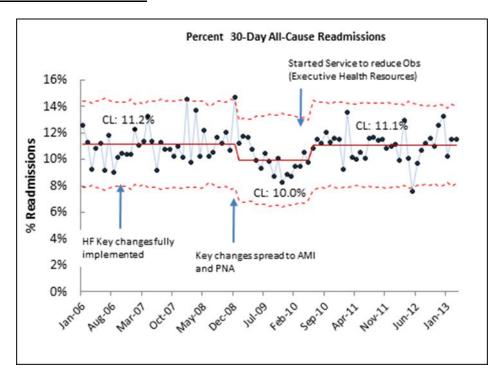
Heart failure (HF) patients were the first population that the cross-continuum team worked with. The majority of the changes (e.g., enhanced assessment, Teach Back, home care coordination visit at 24 to 48 hours, and seven-day follow-up clinic appointment) for HF were hardwired by mid-2007, signified by the blue line in the graph below. The readmission rate showed a downward trend by mid-year 2007. When the work started, the HF readmission rate was 24-25 percent. By the end of 2009, the HF rate was running 15 percent to 16 percent.

In June 2010, there was a change related to reducing the utilization of observation status and moving those observations to inpatient status. The hospital worked with a consulting firm providing 24/7 telephonic support to assist in capturing the optimal level of care. The result of this was an upward trend to the readmission rate, as many of the patients in observation status were now being (re)admitted as inpatients. The chart below shows 110-150 patients per month that were previously in outpatient observation status but are now in the inpatient status. Readmission rates show the impact.

#### Impact of Moving Patients from Observation status to Inpatient Status



#### All-Cause Readmission Rate

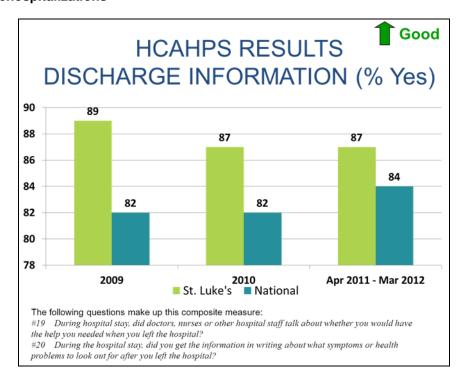


In late 2008, with a standardized process for heart failure hardwired, the cross-continuum team expanded their work to the MI, pneumonia and COPD populations. Many of the heart failure key changes were spread to these patient populations. The all-cause readmission

rate decreased during 2009 and the first part of 2010. However, the all-cause readmission rate showed the same trend as heart failure in June 2010 when the operational definition changed, moving the observation status into the inpatient status.

The P-chart is showing wide variation, but it is common cause variation over the last two years. The work has been influenced by several internal and external factors, including:

- Serving a different population, particularly end-stage renal disease. In the second half of 2012, there was a significant impact from patients with co-morbid renal disease on dialysis. They had multiple readmissions during these times. A new for-profit dialysis center had opened mid-year, and it took some time to improve patient flow and communication. Of interest, the St. Luke's lung navigator in the outpatient pulmonary clinic has acknowledged the same issues with end-stage renal disease and the pulmonary population.
- Volumes. The overall impact of volumes in the denominator impacts the rate. Discharges from one month to the next vary widely. However, volumes did change in 2012. In the first half of 2012, the average monthly denominator (discharges) was 890. The average numerator (readmissions) was 93. In the last half of the year, our average monthly denominator was 805. The average numerator was 97. This creates a difference between readmission rates for those two time periods of 10 for the first half of 2012 to 12 percent for the second half. Specific to heart failure, in November 2012, there were nine readmissions and 23 discharges. In December 2012, there were nine readmissions and 18 discharges, resulting in a differences in the readmission rate (from 39 to 50 percent).
- Conversion to new comprehensive electronic medical record with Computerized
   Physician Order Entry (CPOE). This occurred in June 2012 and was a major disruption
   to all workflows. All processes changed. The impact is unclear, but the disruption was
   major and priorities changed during the implementation, and all hospital staffs had major
   learning curves during the first three to four months.
- Results: Outcome measures from HCAHPS for questions 19 and 20 (see chart below)



## Breakthroughs and Key Lessons Learned Through the Journey to Reduce Readmission by the St. Luke's Team:

- Importance of engaged executive leaders;
- Patients and families help transform care in profound and unexpected ways;
- The patients' and families' home environment must be understood;
- The power of relationship building and collaboration of the cross-continuum team builds new ideas to the work and removes many of the "silos" in the care;
- Involving the frontline staff in the changes helps them understand why they are important and grows ownership by engaging them in redesign;
- Ongoing monitoring of process and outcome measures is important to hardwiring best practices;
- The role of information technology in the processes should be addressed simultaneously with the work; and

#### Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

- Using patient stories unleashes energy and participation that becomes evident in process and outcome results.
- St. Luke's was featured in a Brookings Institute Case Study.



prepared at the request of the Center for Medicare and Medicaid Innovation (CMMI) http://www.mitre.org/work/health/news/bundled\_payments/St\_Lukes\_Case\_Study.pdf

#### University of California at San Francisco<sup>1</sup>

In October 2008, with funding from the Gordon and Betty Moore Foundation (GBMF), the University of California at San Francisco (UCSF) joined with IHI and three other San Francisco Bay Area hospitals to reduce 30-day and 90-day readmissions for elderly heart failure patients. Starting off as participants in IHI's Transforming Care at the Bedside initiative, clinicians and staff at UCSF worked to test, implement, and spread the four key changes for creating an ideal transition home.

In addition to the technical assistance from IHI, UCSF received funding from GBMF for two parttime heart failure nurses to coordinate a disease management program. Their initial focus was
on discharge planning, but it quickly expanded to include care coordination across the
continuum. These UCSF team leaders paid particular attention to communication. They
identified the key stakeholders across the system and met with each to explain the program and
its goals. They wrote and distributed weekly newsletters to share stories and information about
their progress, and they reached outside the hospital to share information and ideas with crosscontinuum providers such as home health care agencies, skilled nursing facilities, and primary
care physicians. The team believes that this unwavering commitment to sharing information,
telling stories, and understanding the role of the whole system in keeping patients safe at home,
has been instrumental to their success.

Associate Chief Medical Officer, Adreinne Green, MD, and Director of Quality Improvement and Regulatory Affairs, Brigid Ide, RN, MS, have supported the heart failure program and the readmissions work through developing an Excellence in Transitions in Care Committee working with multiple service lines to spread the improvements across the entire hospital.

#### **Key Changes Implemented**

#### 1. Perform an Enhanced Assessment of Post-Hospital Needs

Nurses complete admission assessments with patients and families within 24 hours of admission. Primary care physicians and other members of the care team are notified of the admission. Pharmacists and physicians reconcile medications upon admission. Referrals for smoking cessation counseling, case management, social services, and dietary consultations are initiated when indicated.

<sup>&</sup>lt;sup>1</sup> While UCSF is not a participant in the STAAR initiative, this case study represents results that were achieved by implementing IHI's recommended changes in an academic medical center.

#### Key Learning to Date:

Approximately a year into the project, the team at USCF began to realize that the enhanced assessments were not being reliably completed. They assumed that since admission assessments were already a part of the existing process that the assessments were being completed, but the data showed that about one-third of their patients were not being adequately assessed within 24 hours. This prompted the team to investigate why, and, using an anonymous survey tool, they harvested information from nurses on the barriers to prompt completion of assessments and uncovered actionable issues. This information was shared with leadership and a separate task force was chartered to address the barriers. Since bigger solutions would take time, the problems led them to think about focusing on the specific needs of their high-risk patients in order to make the key components of assessment reliable for them. For example, they realized that, in particular, failure to assess promptly was resulting in delayed consults for dietary consultations and for physical therapy.

#### 2. Provide Effective Teaching and Facilitate Enhanced Learning

The heart failure nurses assessed and redesigned their patient education materials and processes in accordance with health literacy principles. Materials were reviewed by a select group of cardiologists, hospitalists, dietitians, and a geriatric clinical nurse specialist (CNS) and included a general overview of heart failure, heart failure zones (green, yellow, and red – see Figure on page 85), a guide to living with heart failure, a low-salt eating plan, daily weight charts, fluid restriction, and information on falls prevention. Four essential HF teaching documents are available on the UCSF Patient and Family Education website for anyone to order, in four different languages.

Patients are given an HF discharge binder with thorough (and patient-friendly) education on the disease, medications, and self-management (including weight charts and nutrition labels). Materials are customized for each patient with the name and phone number of the physician to call for questions and follow-up care. And patients are coached on how to talk to physicians when they are having symptoms that need attention.

The HF nurses now identify the primary learners on admission and ensure that the learners have the right information about the patient's post-discharge needs. Teach Back is used during the inpatient stay and during outpatient follow-up calls to assess patient and family understanding of discharge instructions as well as the ability to perform self-care.

To institute Teach Back as a standard of care, the HF nurses started by training and educating nurses on three pilot units to use Teach Back in their daily work. They then taught home health care nurses, SNF staff, and others, about the Teach Back technique and its benefits. They also recruited three to four Teach Back "champions" on each unit to help train and resource the Teach Back technique for staff nurses. Once they felt confident that the technique could be broadly adapted across the institution, they developed specific competencies for staff nurses in the Teach Back technique.

<u>Key Learning to Date</u>: Shifting the focus of education from what nurses and other educators were teaching to what patients were learning has been transformative for the hospital. It quickly became clear that this change was ripe for spreading across the hospital for the care of all patients, not just heart failure patients.

The coordinators found that the educational materials needed a complete overhaul. They brought in multidisciplinary partners (physicians, pharmacists, dieticians) to make sure materials met everyone's needs (staff, patients and families, and others). For example, patients needed information on which physician to call and for what, which led the team to incorporate doctors' names and phone numbers into the educational materials. Patients also need coaching on how to talk to physicians when they are in the "yellow" heart failure "zone," so scripts were developed and included in the educational packets. The revisions to the materials took months, but the team was encouraged by the results.

#### 3. Ensure Post-Hospital Care Follow-up

To ensure appropriate post-acute follow-up care, the primary care team schedules a follow-up appointment (within seven days of discharge for patients with primary heart failure) with the assistance of the scheduler. The Case Manager prompts home health care orders from the primary care team; and the HF nurse verifies the follow-up appointment and home health care orders prior to discharge. (Home health care referrals have increased from about 51 percent in 2009 to 73 percent in 2011 and 77 percent in 2012.)

The HF nurses call patients that have been discharged to home within three to five days after discharge, and again within 14 days after discharge. On the first follow-up call, the patient is asked if they were discharged with a follow-up appointment and if so, what the date of the appointment was.

#### **Institute for Healthcare Improvement**

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

In August 2010, UCSF launched GeriTraCCC, a new service designed to provide transitional care to older heart failure patients at risk for post-discharge complications. GeriTraCCC provides post-discharge house calls and works with the home health nurses and each member of the care team to smooth the patient's transition and facilitate care for geriatric issues which may be impeding his or her optimal care at home. Criteria for referral include:

- Prior admission within six months;
- Scheduled follow-up appointments that were missed or unable to attend;
- Cognitive concerns and/or low health literacy concerns;
- Caregiver adequacy concerns;
- Complicated change in medications; and
- Seen by inpatient Palliative Care Service or needing post-discharge palliative care follow-up for symptom management or goals of care.

Key Learning to Date: An early "a-ha" moment came when the team realized that while a scheduler was routinely making follow-up appointments for patients before discharge, no system was reliably in place to inform those patients that appointments had been made. This led to a better understanding of information flow across the system.

#### 4. Provide Real-Time Handover Communications

Each service is working to improve communication with outside providers. The electronic medical record system EPIC was implemented in June 2012 and this has led to discharge summaries being completed within 48 hours rather than 14 days, and more patient friendly discharge materials. Now the HF nurses email the inpatient team, case manager, UCSF primary care physician, cardiologist, dietician, pharmacist, chaplain, UCSF home care nurses, the HF clinic NPs, and/or skilled nursing facility staff a hand off/handover which includes Teach Back, health literacy, and other concerns. This email initiates an ongoing dialogue of communication.

Medication reconciliation is completed by pharmacists and the bedside nurse at the time of discharge. Work is underway to pilot test a new patient-friendly medication card.

#### Key Learning to Date:

Avoidable Rehospitalizations

Given the opportunity, care teams have a lot of information to share with each other. The HF coordinators started notifying patients' care teams (attending physicians and residents, primary care team, specialists, and case managers) about the Heart Failure Program's services to their patients. This resulted in important patient information being shared across the team.

Lack of communication is the source of many problems that lead to readmissions. Home health care and SNFs welcome opportunities to improve handoff communication, share materials, and change practice in support of better patient care. When it became clear that these providers didn't always know which patients were in the UCSF Heart Failure Program, the team devised a sticker with an easily identifiable logo that was placed on the transition record and included the HF nurses' names and contact information. Now the HF nurses email the SNF team directly.

#### 5. Improve Connections to the Palliative Care Program

As the team began looking more deeply into data on frequently readmitted patients, they realized that there were few opportunities for very sick HF patients to have the difficult discussions with their doctors about goals of care. The team connected with UCSF's wellestablished palliative care program, which had been used primarily for oncology patients, and worked with that team to expand services to HF patients and their families. The team leaders are now certified trainers in end-of-life nursing education, helping them effectively support more goals of care and end-of-life discussions.

6. Collaborate with Post-Hospital Community Providers (HF clinics, primary care physicians, home health care agencies, and skilled nursing facilities)

The UCSF team found that their colleagues receiving patients into the next site of care (particularly SNF and home health care) were thrilled to coordinate and cooperate on reducing readmissions. They shared educational materials and the UCSF team provided in-services on HF to their colleagues, both of which were well received.

#### 7. Provide Supplemental Discharge Teaching

Through close connections with their patients and observations of individual needs and trends, the UCSF team continually identified new ways to help patients stay safely at home, including:

- Education on falls prevention;
- Brochures on spiritual care and palliative care;

#### **Institute for Healthcare Improvement**

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

- Letter summarizing patient status updates to primary care physician; and
- Patient script for calling the doctor for symptoms in the "yellow warning zone" (to help patients communicate about warning signals to their physicians).

#### **Barriers Encountered** (and responses)

- Different systems on different units: The team initiated standardized systems for HF
  Program patients (heart failure folders, discharge checklist, whiteboards in patient
  rooms, daily weights, sticker on transition record) to mitigate the variation.
- Misconception of palliative care: Physicians were reluctant to order palliative care
  consults (which is often thought of as a request for hospice care), but through continued
  education, the palliative care team consults have increased.
- Follow-up appointments: It is often difficult to schedule a follow-up appointment within one week of discharge. The team is now promoting follow-up appointments with primary care physicians and have seen improvement. It has now become a standard of care to for primary heart failure patients to have a follow up appointment within seven days of discharge, and secondary heart failure patients to have follow up within 14 days of discharge. High-risk patients are now able to schedule an appointment with a nurse practitioner in the clinic immediately post-discharge.
- Discharge process: The redesigned discharge process aimed to address unreliable
  processes for medication reconciliation, lack of coordinated communications, and
  variability of processes on units, and now also includes utilization of Teach Back as well
  as guidance for ordering consults and services needed.

#### **Breakthroughs and Key Lessons Learned**

- Collaboration with IHI provided an essential start and guidance throughout the process
- Building relationships and trust are key and it takes time; patients with HF and other chronic diseases require more than simply teaching (must get patient "buy-in")
- Importance of palliative care and goals of care discussions
- Power of the patient story to foster learning and drive change
- Results are not immediate; it takes time to show improvement

Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

- Teach Back works; a focus on health literacy is necessary
- Senior leadership support is essential
- Communication, communication, communication

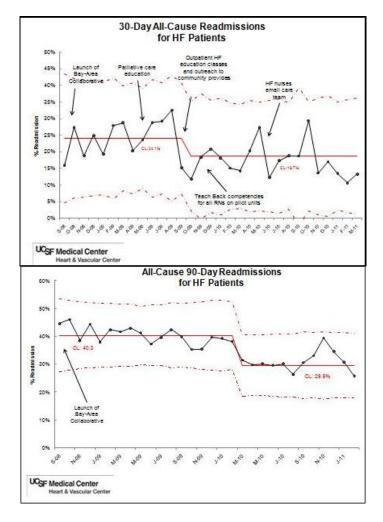
#### **Expansion and Sustainability**

In June of 2012, the age of the patients followed in the heart failure program was lowered to 50 years and older due to participation in "BEAT HF", a telemonitoring randomized controlled study. Since then, the age has now been lowered to 18 years and older on all units within the hospital. In April 2013, the HF nurses also began teaching and supporting patients 65 and older who had acute myocardial infarctions (AMI). The readmissions work at UCSF continues to expand to additional services through the Quality and Improvement Department.

The next steps for the Heart Failure Program are to continue the outreach into the community, working with the Gordon and Betty Moore Foundation project Avoiding Readmissions through Collaboration (ARC), and continuing to spread the Teach Back method of patient education throughout the hospital and to community partners

**Results: Outcome Measures** 

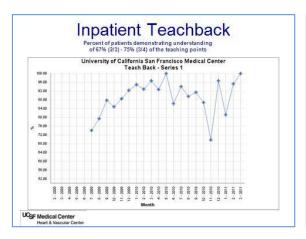
Figure 42: Results: Outcome Measures

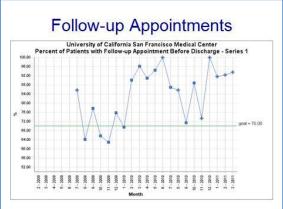


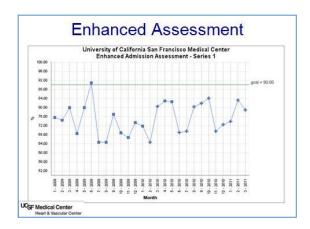
For UCSF heart failure patients, 30-day all-cause readmissions have declined since the launch of this initiative, from about 24 percent in 2009 to about 19 percent in 2010, and continue to decline towards the current goal of 16 percent or less. This data suggests that the team averted approximately 41 admissions in calendar year 2010. In an analysis of the financial impact to Medicare for reducing 30-day readmissions, if UCSF maintained a 16 percent readmission rate it would mean a savings of approximately \$1 million annually for Medicare.

**Results: Process Measures** 

Figure 43: Results: Process Measures







## **VII. How-to Guide Resources**

		Return To:
Summary of Typical Failures Observed in the Transition from Hospital to Community Settings	p. <u>104</u>	
Going Home: What You Need to Know	p. <u>107</u>	p. <u>10</u>
Be Smart, Leave S.M.A.R.T	p. <u>110</u>	p. <u>10</u>
Always use Teach Back	p. <u>111</u>	p. <u>13</u> , <u>20</u>
Key Educational Topics for High-Volume Clinical Conditions	p. <u>112</u>	p. <u>15</u>
Observation Guide: Observing Current Discharge Processes	p. <u>114</u>	p. <u>32</u>
How to Create a Pill Card	p. <u>116</u>	p. <u>33</u>
User-Friendly Medication Card	p. <u>116</u>	p. <u>33</u>
Taking Care of Myself: A Guide for When I Leave the Hospital	p. <u>117</u>	p. <u>35</u>
BOOST Patient PASS: A Transition Record	p. <u>120</u>	p. <u>35</u>
Hospital to Home Discharge Summary and Care Coordination	p. <u>121</u>	p. <u>36</u>
Readiness Assessment/Partnering with Patients and Families to Accelerate Improvement	p. <u>122</u>	p. <u>40</u>
Diagnostic Worksheet: Part 1	p. <u>124</u>	p. <u>48</u> , <u>60</u>
Diagnostic Worksheet: Part 2	p. <u>126</u>	p. <u>49</u> , <u>60</u>
PDSA Worksheet	p. <u>128</u>	p. <u>56</u>
Example: Completed PDSA Worksheet	p. <u>129</u>	p. <u>56</u>

## Summary of Typical Failures Observed in the Transition from Hospital to Community Settings

In 2006, IHI's review of the literature plus work with patients, families and improvers on transitions in care from hospital to home narrowed the list of failures in healthcare to the following critical list. The typical failures listed here are the basis for the four key changes addressed in this How-to Guide.

#### 1. Partner with Patient and Family to Determine Post-Hospital Needs

**Typical failures** in the assessment of discharge needs:

- Excluding the patient and family caregivers in assessing needs, identifying needed resources, and planning for discharge -- leading to a poor understanding of what patients need to function in the home environment;
- Insufficiently understanding the patient's functional ability, physical and cognitive health status, and social and financial concerns, which may result in transfer to a care setting that is not appropriate for the patient's needs;
- Failing to probe for unrealistic patient and family optimism to manage care at home;
- Not addressing the whole person (e.g., focusing on one clinical condition, missing underlying depression, social needs, advanced illness, etc.);
- Not addressing palliative care or end-of-life issues, including advance directives or planning beyond Do Not Resuscitate (DNR) status;
- Failing to recognize or address medication errors, polypharmacy, and incomplete or lack of medication reconciliation; and
- Labeling the patient as "noncompliant" and not recognizing the care team's responsibility for facilitating the acquisition, knowledge, and skills for patient self-care.

#### 2. Provide Effective Teaching and Facilitate Enhanced Learning

**Typical failures** found in patient and family caregiver education:

Assuming that the patient is the key learner;

## Institute for Healthcare Improvement

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

- 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; and
- Failing to ask clarifying questions about instructions and plan of care and non-adherence
  of patients regarding self-care, diet, medications, therapies, daily weights for patients
  with renal or heart failure, follow-up, and testing all of which may be due to patient and
  family caregiver confusion.

#### 3. Ensure Post-Hospital Care Follow-Up

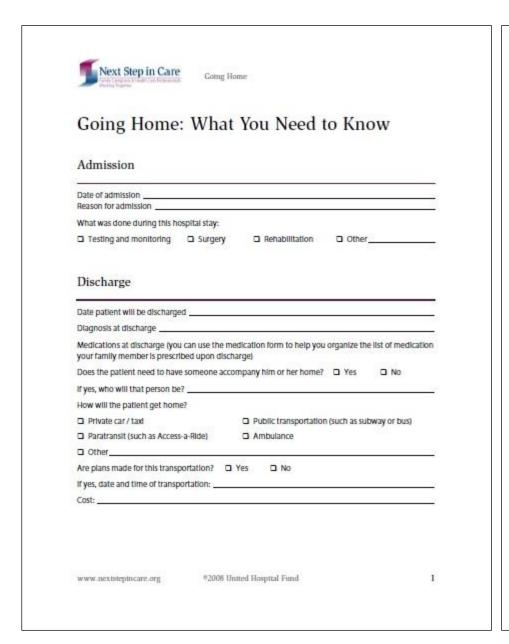
**Typical failures** following discharge from the hospital:

- Failing to simplify complex medication regimens;
- Failing to clarify with patient and family the need for and schedule follow-up appointments with appropriate care providers, including specialists;
- Delaying follow-up too long after hospitalization;
- Scheduling the follow-up visit made the sole responsibility of the patient;
- Failing to keep follow-up appointments because of illness, transportation issues, or poor communication about when/where to arrive;
- Not clarifying which of multiple clinical care providers to call when problems arise; failing to provide an emergency plan with the phone number the patient should call first;
- Failing to identify weaknesses in the patient's social support and the financial implications for the patient of the cost and access to medications.
- Patients' struggling to carry out self-care activities (e.g., medications, therapies, daily
  weights or treatments) because of difficulties comprehending instructions, or because
  they lack resources (financial constraints, lack of transportation, etc.);
- Failing to assure essential equipment (e.g., scale, supplemental oxygen, or equipment used to suction respiratory secretions) is available and timely in the home; and
- Failing to provide community-wide consistent information being given by all clinical providers.

#### 4. Provide Real-Time Handover Communications

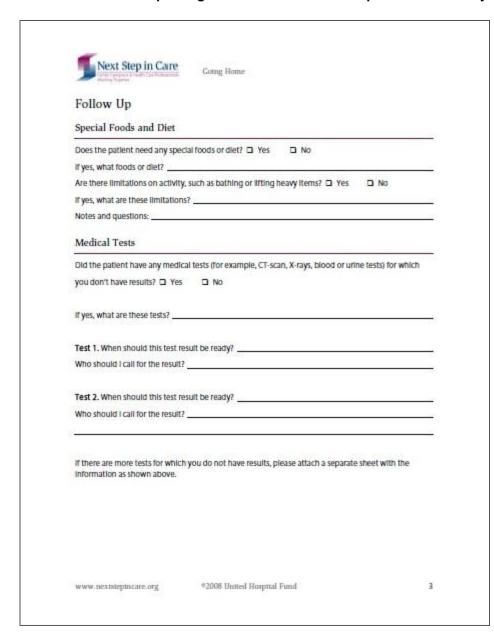
#### **Typical failures** in handover communication:

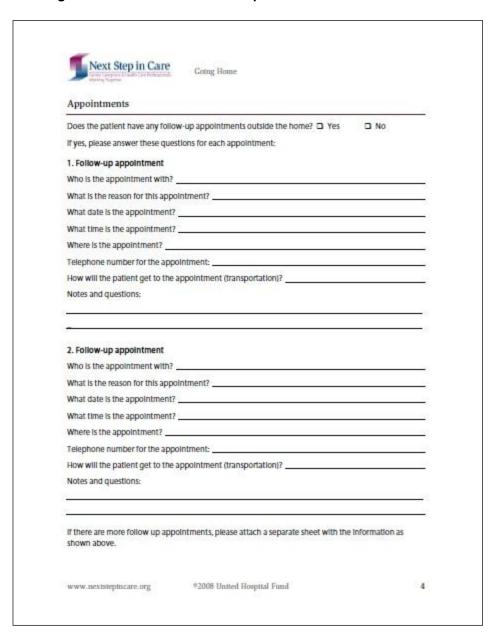
- Failing to address medication discrepancies across care settings;
- Failing to clarify, reconcile across care settings, and tailor discharge instructions to a
  patient's level of health literacy;
- Failing to communicate the patient's discharge plan in a timely fashion and to adequately convey important anticipated next steps to the nursing home team, home health care nurses, primary care physician, or family caregiver;
- Incompletely describing current and baseline functional status making it difficult to assess progress, prognosis, and provide the critical handover data;
- Providing discharge instructions that are inadequate, incomplete, illegible, or missing;
- Failing to predict and prepare for care unraveling as the patient leaves the hospital (e.g., poorly understood or unidentified cognition issues emerge and the patient is no longer able to manage medications, or the family caregiver is no longer available).



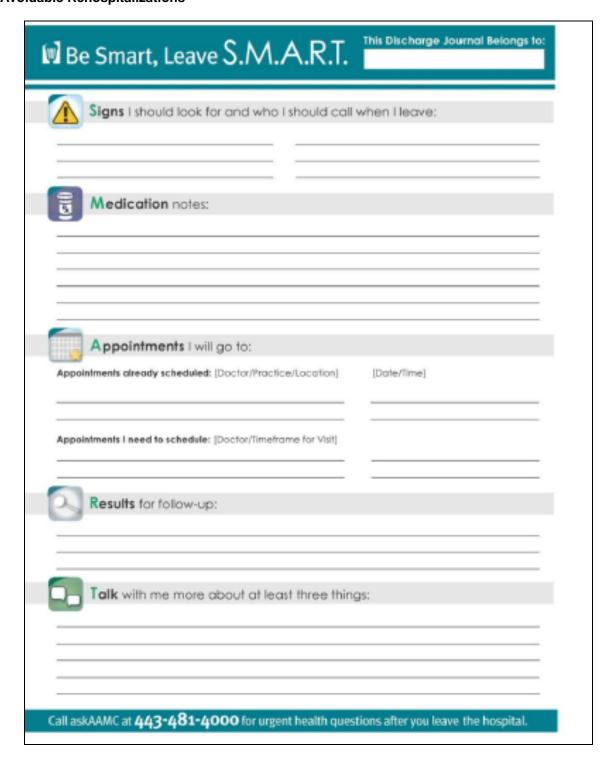
Medical Equipment	t.
Does the patient need sp	pecial medical equipment or supplies?   Yes  No
If yes, what type of medi	ical equipment? (Check all that apply)
□ Cane	☐ Colostomy care supplies
☐ Wheelchair	□ Oxygen
☐ Hospital bed	□ IV setup
□ Walker	□ Respirator
<ul> <li>Other (such as diaper</li> </ul>	rs or disposable gloves)
Was this medical equipn	nent ordered?  Yes No
If yes, from where?	
Telephone number:	
Plans for delivery:	3
Special Instructions:	
Special instructions:	
Special Instructions: Other notes (rental, co-p	oay, delivery):
Special instructions: Other notes (rental, co-p Home Care Services	oay, delivery):
Special instructions: Other notes (rental, co-p Home Care Services	s  rred for home care services?  Yes No
Special instructions: Other notes (rental, co-p Home Care Services is the patient being refe If yes, what type? (Check	s  rred for home care services?  Yes No
Special instructions: Other notes (rental, co-p Home Care Services is the patient being refe If yes, what type? (Check	s  rred for home care services?  Yes No call that apply) tasks like wound care) Physical therapy (PT)
Special instructions: Other notes (rental, co-p Home Care Services is the patient being refer if yes, what type? (Check Nursing (for medical)	s  rred for home care services?  Yes No c all that apply) tasks like wound care)  Physical therapy (PT) y (OT)  Speech therapy
Special instructions: Other notes (rental, co-p Home Care Service: is the patient being refei if yes, what type? (Check Nursing (for medical) Occupational therap) Home health aide (at	s  rred for home care services?  Yes No c all that apply) tasks like wound care)  Physical therapy (PT) y (OT)  Speech therapy
Special instructions: Other notes (rental, co-p Home Care Services Is the patient being refe If yes, what type? (Check Nursing (for medical) Occupational therapy Home health aide (at	s  rred for home care services?  Yes No (all that apply) tasks like wound care)  Physical therapy (PT) (OT)  Speech therapy tendant)
Special instructions: Other notes (rental, co-p Home Care Services is the patient being refe if yes, what type? (Check Nursing (for medical) Occupational therapy Home health aide (at Other (such as Meals Name of home care ages	s s  rred for home care services?  Yes  No c all that apply) tasks like wound care)  Physical therapy (PT) y (OT)  Speech therapy tendant) on Wheels)
Special instructions: Other notes (rental, co-p Home Care Services is the patient being refe if yes, what type? (Check Nursing (for medical) Occupational therapy Home health aide (at Other (such as Meals Name of home care age! Telephone number:	s  rred for home care services?  Yes  No  t all that apply)  tasks like wound care)  Physical therapy (PT)  y (OT)  Speech therapy  tendant)  on Wheels)

# Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations





Questions? Concerns? Please call the discharge planner or health care team member who helpe make this plan. You can reach this person at Other notes:	ed
Other notes:	
lame of family caregiver:	
Name of discharge planner who helped make this plan:	
Date this plan was made and discussed:	





# **Teach-back Observation Tool**

Care Team Member:		Date:					
Observer:		Time:					
Did the care team member	Yes	No	N/A	Comments			
Use a caring tone of voice and attitude?							
Display comfortable body language, make eye contact, and sit down?							
Use plain language?							
Ask the petient to explain in their own words what they were told to do about:  Signs and symptoms they should call the doctor for?  Key medicines?  Critical self-care activities?  Follow-up appointments?							
Use non-shaming, open-ended questions?							
As oid asking questions that can be answered with a yes or no?							
Take responsibility for making sure they were clear?							
Explain and check again if the patient is unable to use teach-back?							
Use reader-friendly print materials to support learning?							
Document use of and patient's response to teach-back?							
Include family members/caregivers if they were present?							









### **Key Educational Topics for High-Volume Clinical Conditions**

St. Luke's Hospital, Cedar Rapids, Iowa, 2011

Pick an educational topic to teach your patient/family. Narrow it down to four or more teaching points: the "must haves" or "vital few" for the patient/family to know when discharged.

Generic	Heart Failure	COPD	Stroke	Chronic Kidney Disease	Mental Health
Patient should explain diagnosis and health problems for which they need care.  • General understanding of disease process and self-care • Identify reason for hospitalization and current medical diagnosis	How would you explain heart failure to your family?	Tell me what you know about your COPD.	Do you know what happens when you have a stroke?	What do you need to do every day when you get home?  Monitor B/P  Weigh daily – in the morning before breakfast; compare to yesterday's weight  Eat a balanced diet; monitor and limit your intake of protein, salt, and sugar  Reduce or stop drinking alcohol  Eat low-salt food  Balance activity with rest periods	Tell me how you would describe your condition to someone.
Patient should explain danger signs — what signs and symptoms to watch for. Who would you call if?	What symptoms would you report to your doctor?	Which signs or symptoms should you watch for?  • Wheezing and coughing more than normal • Increase and more shortness of breath than normal • Changes in phlegm (color, texture, or amount) • Using rescue inhaler or inhaler more than normal • Feeling more tired than normal • Unable to do usual	Do you know why early recognition and treatment of stroke is important?	What are you going to watch for when you get home?  B/P  Swelling of legs, hands, face, or stomach  Maintaining stable weight — no weight gain of more than 3 lbs. in one day  Activity ability  Urination	What symptoms should you report to your doctor or therapist?  • Unable to take medications  • Not sleeping or sleeping too much  • No appetite  • Trouble paying attention  • Hearing voices or voices getting worse  • Have trouble taking care of your basic needs  • Have tremors, rigid muscles, spasms, restlessness  • Withdrawing from others

#### Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

Generic	Heart Failure	COPD	Stroke	Chronic Kidney	Mental Health
				Disease	
		activity			
Patient should explain what to do if danger/red flags/signs or symptoms occur.  What is the call to action (what to watch for)?  What would you do if they occur?  When would you call?  What would you do if?  Name three warning signs indicating the need to call your doctor? 911?	What weight gain would you report to your doctor?     Who would you call if you gain more than 3 lbs. in one day?	What would you do if you were using your inhaler more than normal?	What signs or symptoms should you watch for to indicate you may be having a stroke?     Five symptoms related to FAST     Confusion, trouble speaking or seeing, dizziness     Weakness or numbness     B/P above targets      Explain why you should call 911 instead of driving to the hospital if you are having a stroke.	What symptoms would tell you to call your physician?  B/P – top number over 180, bottom number over 100  More shortness of breath than usual  Weight gain of 5 lbs. or more in 3 days  Swelling in legs, ankles, stomach, hands, or face  Not able to eat  Metal taste in mouth  Breath that smells like ammonia  Fever about 101 degrees Fahrenheit  Skin is itchy or you get a rash  Trouble urinating or new blood in urine  Unable to take your medications	<ul> <li>What is your plan of action for worrisome symptoms or situations?</li> <li>What should you watch for?</li> <li>What would you do if this happens?</li> <li>When would you call?</li> <li>Who would you do if?</li> </ul>
Patient should explain key medications for principal diagnosis.  Tell me what you know about  Can you tell me your medication schedule?	What is the name of your water pill?	<ul> <li>Do you know the name of your rescue inhaler?</li> <li>Show me how to use your inhaler.</li> </ul>	Can you describe the medication(s) you are taking to help prevent a stroke?	What is your schedule for taking your medications?	What situations should you avoid?
Patient should explain key points of eating plan.	What foods should you avoid?			What foods should you avoid?	
Patient should explain follow-up appointments.  Importance of filling prescription Importance of scheduled follow-up appointments	When will you see your physician next?	When will you see your physician next?	When will you see your physician next?	When is your next follow-up appointment and with whom?	Why is it important to keep your follow-up appointments?

# **Observation Guide: Observing Current Discharge Processes**

Observe three patients on the day of discharge (i.e., last day of the hospital stay). Spend one to three hours with each patient and family members to discover what went well, what didn't work as planned or predicted and opportunities for improvement.

What do you predict you will observ	ve?					
Did the care team member(s)	Patient # 1		Patient # 2		Patient # 3	
Did the care team member(s)	Yes	No	Yes	No	Yes	No
Assess the patient's clinical status and determine readiness for discharge?						
Reconcile medications prior to completing instructions for the medication regimen prior to discharge?						
Initiate plans to ensure that the patient has the essential supplies and equipment for identified post-acute care needs?						
Provide a patient-friendly summary of home health care instructions tailored to the patient's and/or family caregiver's level of health literacy?						
Use Teach Back to assess the patient's understanding of the critical elements for self-care and medications?						
Arrange for the patient's transportation home or to a community setting?						
Arrange follow-up appointments in collaboration with the patient and/or family caregivers?						
Encounter any last minute problems causing delays in discharging the patient?						

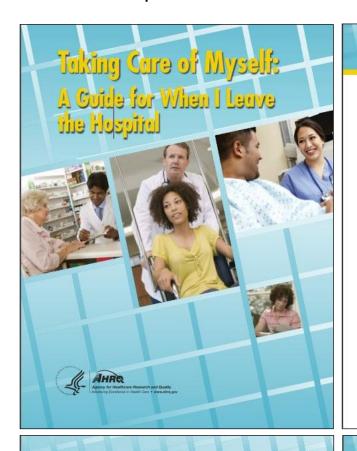
Page 114

# Observation Guide: Observing Current Discharge Processes Reflections after observations are completed (to be shared with the entire team):

What did you learn?
How did your observations compare to the predictions?
What, if anything, surprised you?
what, it anything, surprised you?
What new questions do you have? What are you curious about?
What assumptions about patient education that you held previously are now challenged?
That accumptions about patient substitution that you note providedly are now chancingout
As a result of the findings from these observations, what do you plan to test?
1.
2.
3.
4.
5.

Name: Sarah Smi Pharmacy phone	th number: 123-456-789		Date Created: 12/1	15/07		
Name	Used For	Instructions	Morning	Afternoon	Evening	Night
Simvastatin 20mg	Cholesterol	Take 1 pill at night		·		
Furosemide 20mg	Fluid	Take 2 pills in the morning and 2 pills in the evening	00		00	
Insulin 70/30	Diabetes (Sugar)	Inject 24 units before breakfast and 12 units before dinner	24 units		12 units	

Use a pencil. Do not list medic List <u>all</u> medicine	cine Record for: cines I will take for less th s I take, including prescri ers, oxygen, creams and	an two weeks (exaptions, eye drops,		).	<del> </del>
Date added or changed	Medicine	How much? (Strength/ Dosage)	How often do I take it?	What is it for?	Doctor who prescribed it



To use this guide you should:

- Talk with the hospital staff about each of the items that are listed in the guide.
- Take the completed guide home with you. It will help you to take care of yourself when you go home.
- Share the guide with your family members and others who want to help you. The guide will help them know how to help take care of you.
- Bring the guide to all of your doctor appointments so the doctor knows what you have been doing to care for yourself since you left the hospital.

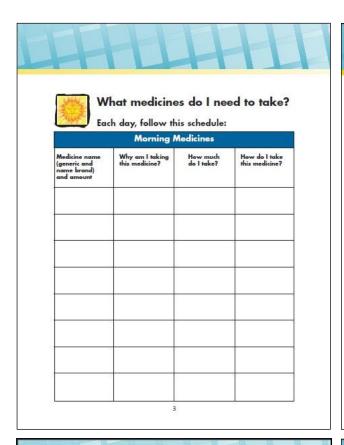
This guide is adapted from Project Re-Engineeral Discharge (RED), which was funded by AHRQ and conducted by Brian Jack, M.D., and colleagues at Boston University Medical Center. Additional mols for implementing Project RED are currently being developed.

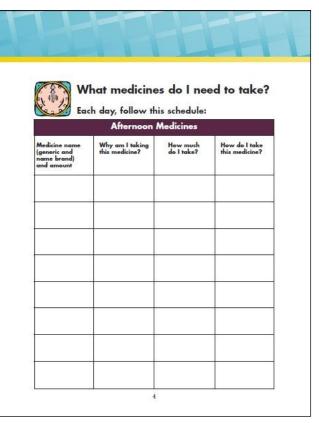
#### Taking Care of Myself: A Guide for When I Leave the Hospital

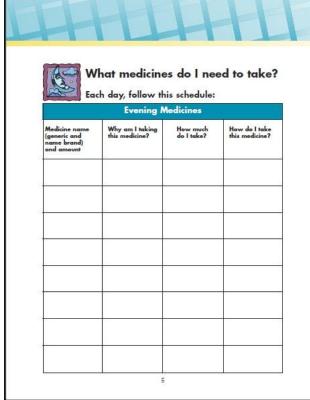
When you leave the hospital, there are a lot of things you need to do to take care of yourself. You need to see your doctor, take your medicines, exercise, eat healthy foods, and know whom to call with questions or problems. This guide helps you keep track of all the things you need to do.

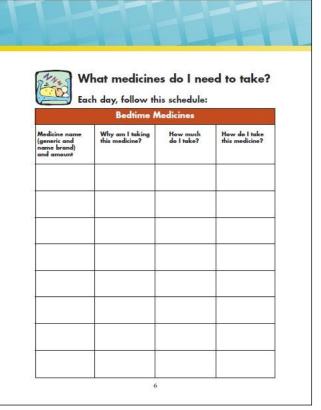
My name:	
When I'm leavin	g the hospital
If I have questio	ns or problems, I should call:
Phone number:	
If I have a seriou	s health problem, I should call:
Phone number:	

What is	my medical problem?	Status etus etus etus etus et	
What ar	e my medication allergies?		
Where is	s my pharmacy?		
What ex	ercises are good for me?		
What sh	ould I eat?		
What ac	tivities or foods should I avoid?	Marine edite edite edite edite	II-lockijšt

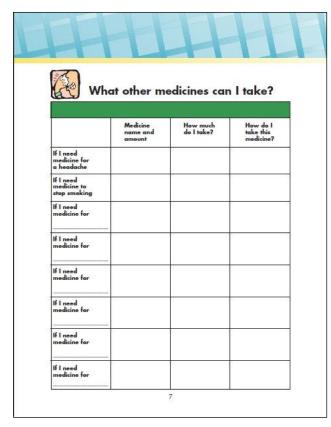








#### Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations











#### Patient PASS: A Transition Record

Patient Preparation to Address Situations (after discharge) Successfully

f I have the following problems	I should	Important contact information:
1	1	My primary doctor:
2.	2.	2. My hospital doctor:
3.	3.	
4.	4.	3. My visiting nurse:
5.	5.	4. My pharmacy:
My appointments:	Tests and issues I need to talk with my	
1	doctor(s) about at my clinic visit:	5. Other.
On:// at: am/pm	1	
For:		I understand my treatment plan. I feel
2.		able and willing to participate actively in
2. On:/_/ at: am/pm For:		my care:
·	3.	
3.		
On:// at: am/pm For:	4.	Patient/Caregiver Signature
4.	5.	Provider Signature
On:// at: am/pm		/ /
For:		Date
	-	+
2.		
3		



#### **Discharge Summary and Care Coordination**

Discharge summaries serve as the primary vehicle for communicating a patient's care plan once they leave the hospital. They are often the only documentation between a hospital and a patient's next setting of care. Here are core components of a discharge summary gathered from sources relevant to improving care coordination.

#### Important Parts of a Discharge Summary

#### The Joint Commission recommends 6 components for a complete discharge summary:1

- 1. Reason for hospitalization
- 2. Significant findings
- 3. Procedures and treatment provided
- 4. Patient's discharge condition
- Patient and family instructions (as appropriate)
- 6. Attending physician's signature

#### The National Quality Forum (NQF) recommends 2 fields be included:<sup>2</sup>

- 7. A comprehensive and reconciled medication list
- List of acute medical issues, tests, and studies for which confirmed results were unavailable at the time of discharge and that require follow-up.

#### Here are 5 additional components identified by experts for inclusion:

- 9. Final diagnoses (primary and secondary)
- 10. Discharge destination
- 11. Follow-up appointments
- 12. Anticipated problems and suggested interventions
- 13. Documentation of patient education

#### **Important Note**

Every facility has a different discharge summary and there is no one standard format. The most important aspect to a discharge summary is that it is done quickly and that the clinicians who need it, have it at the right time in a patient's care.

Draft Document 6/24/11

© 2011 by the American College of Cardiology

<sup>&</sup>lt;sup>1</sup> The Joint Commission. Standard IM.6.10, EP 7.

NQF. Safe Practices for Better Healthcare – 2010 Update. National Quality Forum: Washington, DC. 2010.

# Partnering with Patients and Families to Accelerate Improvement Readiness Assessment

Name of Organization\_\_\_\_\_

			<del></del>		
Area	Current Experience: Make a mark (an X, a circle, or anything that is easy to read) in the box that best describes your team or organization's experience.				
Data transparency	We have not discussed the possibility of sharing performance data with patients and family members.	Our team is comfortable with sharing improvement data with patients and families related to current improvement project.	This organization has experience with sharing performance data with patients and families.		
Flexibility around the aims and specific changes of the improvement project	We have limited ability to refine the project's aims or planned changes.	We have some flexibility to refine the project's aims and the planned changes.	We are open to changing both the aims and specific changes that we test based on patient and family team members' perspective.		
Underlying fears and concerns	We have not discussed our concerns about involving patient and families on improvement teams.	We have identified several concerns related to involving patients and families on improvement teams but have no plan for how to address or manage them.	We have a plan to manage and/or mitigate issues that may arise due to patient and family member involvement on our team.		

Perceived value and purpose of patient/family involvement	There is no clear agreement that patient and family involvement on improvement teams is necessary to achieve our current improvement aim.	A few of us believe patient and family involvement would be beneficial to our improvement work, but there is not universal consensus.	There is clear recognition that patient and family involvement is critical to achieving our current improvement aim.
Senior leadership support for patient and family involvement	Senior leadership do not consider patient and family involvement a top priority.	Senior leaders are aware of and communicate support for patient and family involvement in our team.	Senior leaders consider our participation in this program as a pilot for organizational spread.
Experience with patient and family involvement	Beyond patient satisfaction surveys or focus groups our organization does not have a formal method for patient/family feedback.	We have an active patient/family advisory panel.	Patient and families are members of standing committees and make decisions at the program and policy level.
Collaboration and teamwork	Staff in this organization occasionally work in multidisciplinary teams to provide care.	Staff in this organization work effectively across disciplines to provide care to patients.	Patients and family are included as valued members of the care team in this organization.

- 1. What supports moving in this direction?
- 2. What are your current challenges?
- 3. How confident are you on successfully involving patients and families on your team (1-10 scale)?

© 2007 Cincinnati Children's Hospital Medical Center and Institute for Healthcare Improvement. Others may use and adapt this tool freely as long as credit is given to CCHMC and IHI.

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

#### Part 1: Chart Reviews of Patients

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

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

# Part 1: Reflective Summary of Chart Review Findings What did you learn? What themes emerged? What, if anything, surprised you? What new questions do you have? What are you curious about? What do you think you should do next? What assumptions about readmissions that you held previously are now challenged?

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

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

# Part 2: Interviews with Patients, Family Members, and Care Team Members in the Community

If possible, conduct the interviews on the same patients from the chart review. Use a separate worksheet for each interview.

Ask Patients and Family Members:  How do you think you became sick enough to come back to the hospital?
Did you see your doctor or the doctor's nurse in the office before you came back to the hospital?  Yes If yes, which doctor (PCP No If no, why not?
Describe any difficulties you had to get an appointment or getting to that office visit.
Has anything gotten in the way of your taking your medicines?
How do you take your medicines and set up your pills each day?
Describe your typical meals since you got home.
Ask Care Team Members in the Community: What do you think caused this patient to be readmitted?
After talking to the care team members about why they think the patient was readmitted, write a brief story about the patient's circumstances that contributed to the readmission.

# Part 2: Summary of Interview Findings What did you learn? What themes emerged? What, if anything, surprised you? What new questions do you have? What are you curious about? What do you think you should do next? What assumptions about readmissions that you held previously are now challenged?

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

Act	Plan
Study	Do

**PDSA Worksheet** 

DA	ΤE			

Study Do Pare Worksheet BATE
Change or idea evaluated:
Objective for this PDSA Cycle:
What question(s) do we want to answer on this PDSA cycle?
Dlan

#### Plan:

Plan to answer questions (test the change or evaluate the idea): Who, What, When, Where

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

Predictions (for each question listed, what will happen if plan is carried out? Discuss theories)

#### Do:

Carry out the Plan; document problems and unexpected observations; collect data and begin analysis.

## Study:

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

#### Act:

What changes are to be made? Plan for the next cycle

**Institute for Healthcare Improvement** 

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



#### Example Completed PDSA Worksheet DATE: 8/10/2010

Change or idea evaluated: Use HF Zone handout to improve patient learning

Objective for this PDSA Cycle: <u>Improve patient understanding of HF self-care by using the zone</u> worksheet, improve nurse teaching skills

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

If we use health literacy principles and teach-back, will (1) our nurses be comfortable using the teach-back technique, and (2) our patients have a better understanding of their care?

#### Plan:

Plan to answer questions (test the change or evaluate the idea): Who, What, When, Where

Emily will talk to Jane (a nurse we know is interested in this project) and ask her to try the change A HF patient with sufficient cognitive ability (Jane will decide) will be identified on August 10 Jane will use HF zone handout example from St. Luke's as teaching tool Jane will ask four St. Luke's sample 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?

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

Jane will write down which answers patients were able to Teach Back successfully and which they had trouble with and come to the next team meeting on the 11<sup>th</sup> and report on her experience

Predictions (for each question listed, what will happen if plan is carried out? Discuss theories)

- Nurse may have trouble remembering not to say "do you understand"
   But will like the change, be able to use the technique, and
- 2) The patient will be able to teach back (will choose someone with sufficient cognitive Ability for the test)

#### Do:

Carry out the Plan; document problems and unexpected observations; collect data and begin analysis.

There wasn't an appropriate patient on the 10<sup>th</sup>, but there was on the 11, Jane reported to the team the next day that the patient was able to teach back three of the four questions – had trouble remembering weight gain to report to doctor. Jane reported that she really liked the new teaching style and wanted to practice it with other patients.

### Study:

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

#### Institute for Healthcare Improvement How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

Jane reported that she did say "do you understand" a couple of times and then would catch herself, but she had explained the test in advance to the patient and they liked the idea, too.

#### Act:

What changes are to be made? Plan for the next cycle

Find one or more patients willing to work with Jane on redesigning patient materials and continue to test the Teach Back technique – Jane will try on more patients and try to recruit another nurse to test with her. Will report back at next meeting. Jane will create a paper tool that will help her keep track of which items the patients teach back so that she can continue to collect the data.

#### VIII. References

- **1.** Fazzi R, Agoglia R, Mazza G, Glading-DiLorenzo J. The Briggs National Quality Improvement/Hospitalization Reduction Study. *Caring: National Association for Home Care magazine*. 2006;25(2):70.
- 2. Alliance for Health Reform. Covering Health Issues 2006-2007: Available at: http://www.allhealth.org/sourcebooktoc.asp?sbid=1.
- **3.** Hackbarth G, Reischauer R, Miller M. *Report to Congress: Medicare Payment Policy.* Washington, DC: Medicare Payment Advisory Committee; March 2007.
- 4. Naylor M. *Making the bridge from hospital to home*. The Commonwealth Fund; 2009. <a href="http://www.commonwealthfund.org/spotlights/spotlights\_show.htm?doc\_id=225298">http://www.commonwealthfund.org/spotlights/spotlights\_show.htm?doc\_id=225298</a>. Accessed April 5, 2011.
- **5.** Jencks SF, Williams MV, Coleman EA. Rehospitalizations among patients in the Medicare fee-for-service program. *N Engl J Med.* Apr 2 2009;360(14):1418-1428.
- **6.** Levine C. Rough Crossings: Family Caregivers Odysseys Through the Health Care System. New York, NY: United Hospital Fund of New York; 1998.
- 7. Grimmer KA, Moss JR, Falco J, Kindness H. Incorporating patient and carer concerns in discharge plans: the development of a practical patient-centred checklist. *The Internet Journal of Allied Health Sciences and Practice*. 2006;4(1).
- **8.** Forster AJ, Murff HJ, Peterson JF, Gandhi TK, Bates DW. Adverse drug events occurring following hospital discharge. *J Gen Intern Med.* Apr 2005;20(4):317-323.
- **9.** Forster AJ. Can you prevent adverse drug events after hospital discharge? *Canadian Medical Association Journal*. 2006;174(7):921.
- **10.** Medicare Payment Advisory Commission. Payment policy inpatient readmissions. *Report to Congress: Promoting Greater Efficiency in Medicare*June 2007:103-120.
- 11. "What Did the Doctor Say?:" Improving Health Literacy to Protect Patient Safety. Oakbrook Terrace, IL: The Joint Commission; 2007.
- **12.** Koh HK BD, Clancy CM, et al. . New federal policy initiatives to boost health literacy can help the nation move beyond the cycle of costly 'crisis care'. *Health Affairs*. 2012;31(2).
- 13. Agency for Healthcare Research and Quality. Guidelines and Other Resources To Finetune Your Writing. https://www.talkingquality.ahrq.gov/content/learnmore/tips/guidelines.aspx. Accessed May 31, 2011.
- 14. Adams K, Lindenfeld J, Arnold JMO, et al. HFSA 2006 comprehensive heart failure practice guideline. J Card Fail 2006; <a href="http://www.hfsa.org/pdf/hfsa\_2006\_comprehensive\_heart\_failure\_guidelines.pdf">http://www.hfsa.org/pdf/hfsa\_2006\_comprehensive\_heart\_failure\_guidelines.pdf</a>. Accessed April 5, 2011.
- **15.** National Patient Safety Foundation. Ask Me 3<sup>™</sup>. <a href="http://www.npsf.org/askme3">http://www.npsf.org/askme3</a>. Accessed April 6. 2011.
- **16.** Osborne H. *Health Literacy from A to Z: Practical Ways to Communicate Your Health Message*. Sudbury, MA: Jones and Bartlett; 2004.
- **17.** *Making Health Care Safer: A Critical Analysis of Patient Safety Practices*: Agency for Healthcare Research and Quality;2001.
- **18.** American Heart Association. Heart Profliers: Your Treatment Decision Tools (R). http://www.americanheart.org/presenter.jhtml?identifier=1486. Accessed April 5, 2011.
- **19.** Schillinger D, Piette J, Grumbach K, et al. Closing the loop: physician communication with diabetic patients who have low health literacy. *Archives of Internal Medicine*. 2003;163(83-90).

- **20.** Phillips C, Wright S, Kern D, Singa R, Shepperd S, Rubin H. 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.
- **21.** Shepperd S, McClaran J, Phillips C, et al. Discharge planning from hospital to home. *Cochrane database of systematic reviews (Online)*. 2010(1):CD000313.
- **22.** 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. *J Am Coll Cardiol*. Aug 18 2004;44(4):810-819.
- **23.** Osei-Anto A, Joshi M, Audet A, Berman A, Jencks S. *Health Care Leader Action Guide to Reduce Avoidable Readmissions*. Chicago, IL: Health Research & Educational Trust; January 2010.
- **24.** Kanaan S. Homeward Bound: Nine Patient-Centered Programs Cut Readmissions. *CHCF.* Sept 2009.
- **25.** Boutwell A, Griffin F, Hwu S, Shannon D. *Effective Interventions to Reduce Rehospitalizations: A Compendium of 15 Promising Interventions.* Cambridge, MA: Institute for Healthcare Improvement;2009.
- **26.** Boutwell A, Hwu S. *Effective Interventions to Reduce Rehospitalizations: A Survey of the Published Evidence.* Cambridge, MA: Institute for Healthcare Improvement;2009.
- **27.** Kansagara D, Englander H, Salanitro A, et al. Risk Prediction Models for Hospital Readmission. *Journal of American Medical Association*. 2011;306(15).
- **28.** Chugh A, Williams MV, Grigsby J, Coleman EA. Better transitions: improving comprehension of discharge instructions. *Front Health Serv Manage*. Spring 2009;25(3):11-32.
- **29.** Crossen-Sills J, Toomey I, Doherty M. Strategies to reduce unplanned hospitalizations of home healthcare patients: a STEP-BY-STEP APPROACH. *Home Healthc Nurse*. Jun 2006;24(6):368-376.
- **30.** Balaban RB, Weissman JS, Samuel PA, Woolhandler S. Redefining and redesigning hospital discharge to enhance patient care: a randomized controlled study. *J Gen Intern Med.* Aug 2008;23(8):1228-1233.
- **31.** Wasson J, Gaudette C, Whaley F, Sauvigne A, Baribeau P, Welch HG. Telephone care as a substitute for routine clinic follow-up. *Journal of the American Medical Association*. 1992;267:1788-1793.
- **32.** Dudas V, Bookwalter T, Kerr KM, Pantilat SZ. The impact of follow-up telephone calls to patients after hospitalization. *The American Journal of Medicine*. 2001;111:26-30.
- **33.** Naylor MD, Brooten D, Campbell R, et al. Comprehensive discharge planning and home follow-up of hospitalized elders: a randomized clinical trial. *JAMA*. Feb 17 1999;281(7):613-620.
- **34.** Mistiaen P, Poot E. Telephone follow-up initiated by a hospital-based health professional for postdischarge problems in patients discharged from hospital to home. *Cochrane database of systematic reviews (Online)*. 2006;4(CD004510).
- **35.** Johnson M LM, Coleman E. STAAR Issue Brief: Enhancing the Effectiveness of Follow-up Phone Calls to Improve Transitions in Care. Cambridge, MA: Institute for Healthcare Improvement; 2012.
- **36.** Committee on Quality of Healthcare in America. Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21st Century.* Washington, DC: National Academies Press; 2001.
- **37.** Kripalani S, LeFevre F, Phillips CO, Williams MV, Basaviah P, Baker DW. Deficits in communication and information transfer between hospital-based and primary care physicians: implications for patient safety and continuity of care. *JAMA*. Feb 28 2007;297(8):831-841.

#### **Institute for Healthcare Improvement**

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

- **38.** *National Voluntary Consensus Standards for Hospital Care: Additional Priority Areas-2005-2006.* Washington, DC: National Quality Forum; July 2006.
- **39.** Ashish K, Jha MD, et al. Use of Electronic Health Records in U. S. Hospitals. *New England Journal of Medicine*. 2009;360:1628-1638.
- **40.** Nationwide Health Information Network: Conditions for Trusted Exchange. *Federal Register.* 2012.
- **41.** DesRoches DM, Campbell EG, et al. Electronic Health Records in Ambulatory Care A National Survey of Physicians. *New England Journal of Medicine*. 2008;359:50-60.
- **42.** Nolan T. Execution of Strategic Improvement Initiatives to Produce System-Level Results. IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement; 2007.
- **43.** Ohno T. *Toyota production system: beyond large-scale production*: Productivity Press; 1988.
- 44. Womack JP, Jones DT, Simon, Audio S. Lean thinking: Simon & Schuster Audio; 1996.
- **45.** Spear SJ. Chasing The Rabbit; How Market Leaders Outdistance the Competition and How Great Companies Can Catch Up and Win. Vol 25. 1 ed. USA: McGraw-Hill; 2009.
- **46.** Kenagy J. Adaptive Design. <a href="http://kenagyassociates.com/adaptive.what.php">http://kenagyassociates.com/adaptive.what.php</a>. Accessed April 12, 2011.
- **47.** Langley GJ, Moen R, Nolan KM, Nolan TW, Norman CL. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance*: Jossey-Bass; 2009.