



How-to Guide:

Improving Transitions from the Hospital to the Clinical Office Practice to Reduce Avoidable Rehospitalizations

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

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How to cite this document:

Schall M, Coleman E, Rutherford P, Taylor J. *How-to Guide: Improving Transitions from the Hospital to the Clinical Office Practice to Reduce Avoidable Rehospitalizations*. Cambridge, MA: Institute for Healthcare Improvement; June 2013. Available at www.IHI.org.

Institute for Healthcare Improvement

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Acknowledgments

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 a growing community of 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. To advance our mission, IHI is dedicated to optimizing health care delivery systems, driving the Triple Aim for populations, realizing person- and family-centered care, and building improvement capability.

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Table of Contents

I. Introduction	p. 1
II. Key Changes	p. 7
1. Provide Timely Access to Care Following a Hospitalization	p. 9
2. Prior to the Visit: Prepare Patient and Clinical Team	p. 17
3. During the Visit: Assess Patient and Initiate New Care Plan or Revise Existing Plan	p. 20
4. At the Conclusion of the Visit: Communicate and Coordinate the Ongoing Care Plan	p. 28
III. Design Elements	p. 32
IV. Infrastructure and Strategy to Achieve Results	p. 39
Step 1. Identify Executive Leadership	p. 39
Step 2. Form a Team	p. 40
Step 3. Identify Opportunities for Improvement	p. 41
Step 4. Use the Model for Improvement	p. 44
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. 52
V. System of Measures	p. 57
VI. Case Studies	p. 59
VII. How-to Guide Resources	p. 77
VIII. References	p. 100

I. Introduction

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

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

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

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

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

The Case for 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.^{1,2} 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.^{1,2} 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.³ 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.⁴ 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 the Clinical Office Practice to Reduce Avoidable Rehospitalizations

This How-to Guide is designed to support office practice-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 ideal transition back to the care team in the office practice. Patients are especially vulnerable to adverse events in the period immediately following discharge, and they need immediate access to a trusted clinician who can answer questions, provide advice, and help ensure that their clinical condition remains stable. Too often, patients find themselves on their own after discharge, struggling to manage their medications, monitor their conditions, and follow instructions received at the hospital. Immediate

post-discharge contact with providers is crucial for preventing an avoidable readmission, especially among patients with multiple conditions or complicated medication and treatment plans, and those with limited capacity for self-care or access to family or community support. Optimal post-discharge care is an important component of the overall care provided in primary care and in specialty practices. Physicians, nurses, and staff in office practice settings already offer a range of services to patients with complex medical needs. These include ongoing evaluation and management of clinical conditions, patient education, referrals for specialty consultation and testing, care coordination, and development of customized care plans to fit individuals' personal needs and preferences. The approaches presented in this How-to Guide are intended to be a resource for clinicians and staff in office practices as they create new ways to provide optimal care for their patients.

Through the expanded implementation of the Patient-Centered Medical Home (PCMH) model⁵ and other practice-based initiatives such as those designed to improve care for those with chronic conditions,⁶ providers in primary care practices are increasingly developing the capabilities to manage the needs of patients with complex conditions as they transition through care settings. PCMH programs may serve as a vehicle for linking independent, community-based physicians with hospitals in order to improve coordination and communication for discharged patients. The Massachusetts Patient-Centered Medical Home Initiative (MA PCMHI) encourages practices to engage hospitals in helping the practices better manage their discharged patients. A cross-walk between the PCMHI key change concepts and the STAAR key changes for hospitals helps illustrate the common elements of the PCMHI and STAAR in Massachusetts.

Figure 1: [Cross-Walk: Massachusetts Patient-Centered Medical Home Initiative \(PCMHI\) and STAAR Key Changes](#)⁵ (How-to Guide Resources, page 97)

Cross-Walk of MA PCMHI and STAAR Hospital-Based Key Changes	
STAAR Program	PCMH Initiative
Perform an Enhanced Assessment of Post-Hospital Needs - Involve the patient, family caregiver(s) and community provider(s) as full partners in completing a needs assessment of the patient's home-going needs. - Reconcile medications upon admission - Identify the patient's initial risk of readmission - Create a customized discharge plan based	Empanelment Primary care practitioner takes responsibility for knowing his/her panel of patients and partnering to manage care across the care continuum

Beginning in 2013, ambulatory physicians, nurse practitioners, and physician assistants are eligible for compensation for care coordination services provided during the 30-day post-hospital discharge period for their Medicare fee-for-service patients. The new transitional care management (TCM) benefit encompasses both face-to-face and non-face-to-face encounters under CPT codes 99495 and 99496. A summary of required activities under the new transitional care management (TCM) benefit is provided below.

Table 1. Care Coordination Services for the Transitional Care Management Benefit (CPT Codes 99495 and 99496)

Non-Face-to-Face Activities	Communication with the patient and/or caregiver within two days of discharge
	Communication with home health or other community services
	Provision of patient or family caregiver education to support self-management, support for treatment adherence, and medication management
	Facilitating access to available community and health resources
	Review of discharge information
	Review and follow-up on diagnostic tests
Face-to-Face Activities	To maximize compensation, ambulatory practices ideally would need to see their patients face-to-face in follow-up within 7 days, but they can also bill if the visit occurs within 14 days.

Additional information about the TCM codes can be found at the following site:

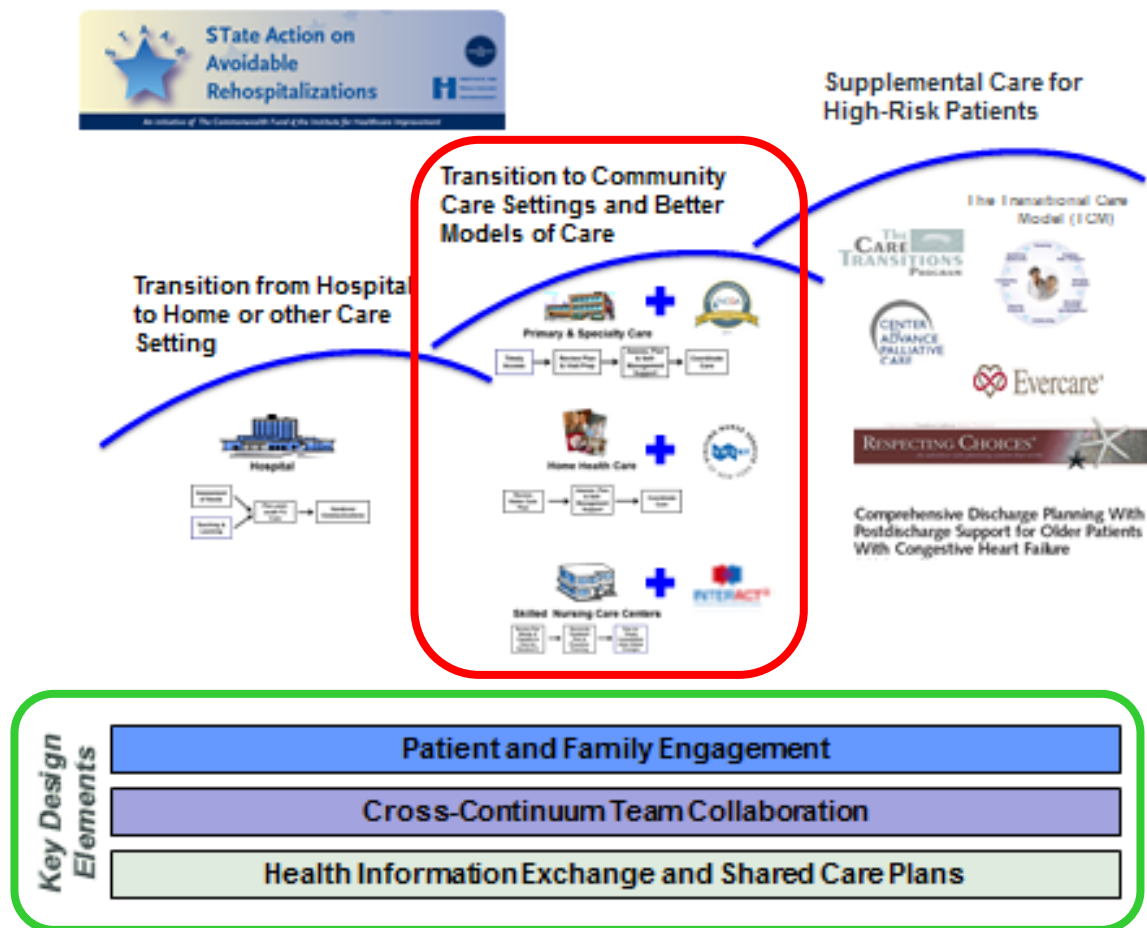
http://www.aafp.org/online/etc/medialib/aafp_org/documents/policy/fed/background/2013feesch edule.Par.0001.File.tmp/Final2013MPFS110812.pdf

Roadmap for Improving Transitions and Reducing Avoidable Rehospitalizations

Based on the growing body of evidence and IHI's experience to date in improving transitions in care after a hospitalization and in reducing avoidable rehospitalizations, IHI has developed a conceptual roadmap (see Figure 2) that depicts the cumulative effect of key interventions to improve the care of patients throughout the 30 days after patients are discharged from a

hospital or post-acute care facility. The transition from the hospital to post-acute care settings, which is depicted by the red box in Figure 2, has emerged as an important priority in IHI's work to reduce avoidable rehospitalizations and is the focus of this How-to Guide. Guidance on leveraging the key design elements to improve care transitions (depicted by the green box in Figure 2) is also included in this guide.

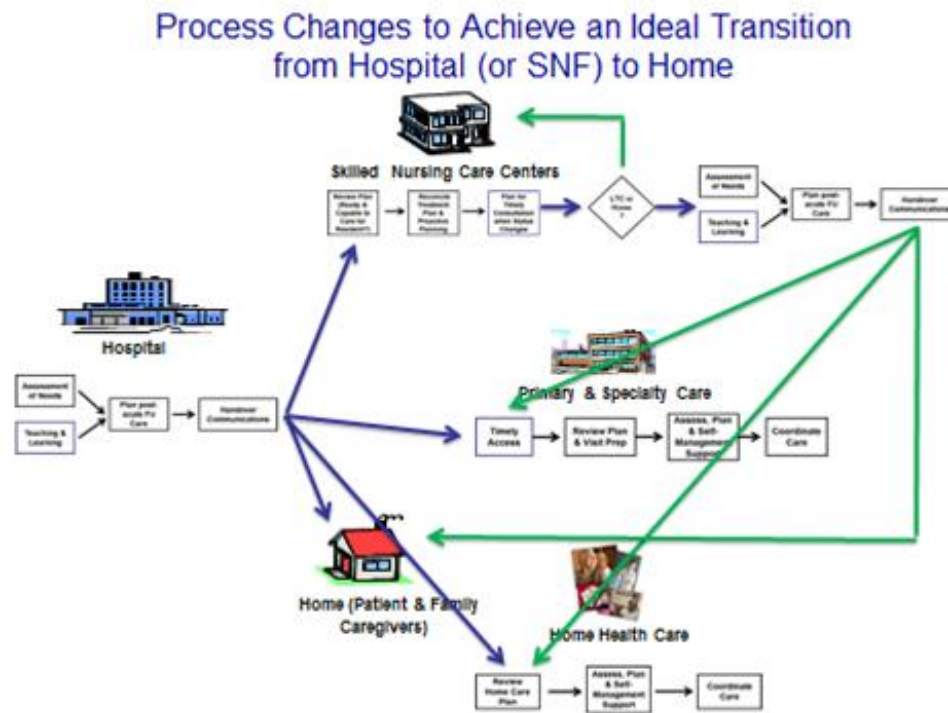
Figure 2: IHI's Roadmap for Improving Transitions in Care after Hospitalization and Reducing Avoidable Rehospitalizations



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 (ready for specified transitions processes) and reliable reception into the next setting of care, such as a primary care practice, home health care, or a skilled nursing facility. The key steps that office practices can take to ensure a smooth transition for their patients — designed together with patients and family members and other care settings — are depicted in Figure 3. An example of

an activated receiver is a physician's office with a specified process for scheduling post-hospital follow-up visits within two to four days of discharge.

Figure 3: Process Changes to Achieve an Ideal Transition from Hospital to the Clinical Office Practice



IHI also provides additional How-to Guides for the hospital setting, skilled nursing facilities, and home health care agencies. These companion guides are designed to assist clinicians and staff in these setting to develop processes that ensure a timely and reliable transition into community care settings.

- [How-to Guide: Improving Transitions from the Hospital to Community Settings to Reduce Avoidable Rehospitalizations](#)
- [How-to Guide: Improving Transitions from the Hospital to Skilled Nursing Facilities 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 four

different organizations implemented successful strategies to reliably implement the changes recommended in this How-to Guide to reduce avoidable readmissions.

II. Key Changes

The *How-to Guide: Improving Transitions from the Hospital to the Clinical Office Practice to Reduce Avoidable Rehospitalizations* outlines four recommended changes for improving the transition of patients from the hospital to the clinical office practice setting by mitigating the typical failures or problem areas associated with this transition (Figure 4): 1) provide timely access to care following a hospitalization; 2) prior to the visit, prepare the patient and the clinical team; 3) during the visit, assess the patient and initiate a new care plan or revise the existing care plan; and 4) at the conclusion of the visit, communicate and coordinate the ongoing care plan.

Figure 4: Key Changes to Create an Ideal Transition to the Clinical Office Practice

1. Provide Timely Access to Care Following a Hospitalization A. Review on a daily basis information received from the hospital about admissions and anticipated discharges. B. Provide the appropriate level and type of follow-up for high-risk, moderate-risk, and low-risk discharged patients.
2. Prior to the Visit: Prepare Patient and Clinical Team A. Review the discharge summary. B. Clarify outstanding questions with sending physician(s). C. Place a reminder call to patient or family caregiver to help them prepare for the visit. D. Coordinate care with home health care nurses and case managers, if appropriate.
3. During the Visit: Assess Patient and Initiate New Care Plan or Revise Existing Plan A. Ask the patient about his/her health-related goals. B. Ask the patient to describe in his/her own words the factors that contributed to the hospital admission or emergency department visit. C. Perform medication reconciliation, with attention to the pre-hospital regimen. D. Determine the need to adjust medications or dosages, follow up on test results, do

monitoring or testing, discuss advance directives, and discuss specific future treatments and additional care support that may be needed. E. Instruct the patient in self-management and have the patient repeat back instructions. F. Explain warning signs and how to respond, and have the patient repeat back this information. G. Provide instructions for seeking emergency and non-emergency after-hours care.
4. At the Conclusion of the Visit: Communicate and Coordinate Ongoing Care Plan A. Print reconciled, dated medication list and provide a copy to the patient, family caregiver, home health care nurse, and case manager, if appropriate. B. Communicate revisions of the care plan to the patient, family caregiver, home health care nurse, and case manager, if appropriate. C. Ensure that the next appointment is scheduled, as appropriate.

Note: The key changes are designed to address the typical failures associated with the related systems of care. See the list of these typical failures in the resource section of this Guide ([page 78](#)).

The recommended changes discussed in this section of the guide draw from the *Issue Brief: The Post-Hospital Follow-Up Visit: A Physician Checklist to Reduce Readmissions*, developed by Dr. Eric Coleman.⁶ The checklist from the brief (Figure 5) can be used in both primary care and specialty care settings. Because there is variation in the level of resources available in different practices (e.g., staffing, information technology, physical space, etc.), each practice is encouraged to use the recommended changes in this How-to Guide as a starting point, making adaptations as needed to its own setting and circumstances.

Figure 5: [A Physician's Checklist for Post-Hospital Follow-Up Visits](#) (How-to Guide Resources, page 84)

Checklist for Post-Hospital Follow-Up Visits	
Prior to the Visit ☐ Review discharge summary. ☐ Clarify outstanding questions with sending physician. ☐ Reminder call to patient or family caregiver to: ☐ Stress importance of the visit and address any barriers. ☐ Remind to bring medication lists and all prescribed	☐ Determine the need to: ☐ Adjust medications or dosages; ☐ Follow up on test results; ☐ Do monitoring or testing; ☐ Discuss advance directives; ☐ Discuss specific future treatments (POLST). ☐ Instruct patient in self-management

1. Provide Timely Access to Care Following a Hospitalization

Recommended Changes:

- 1A. Review on a daily basis information received from the hospital about admissions and anticipated discharges.*
- 1B. Provide the appropriate level and type of follow-up for high-risk, moderate-risk, and low-risk discharged patients.*

To provide timely access to care following a hospitalization, providers in an office practice must be able to anticipate the needs of their hospitalized patients and have capacity in their clinic schedules for the appropriate level of contact.

Laying the Foundation for Post-Hospital Follow-Up Care

We recommend that office practices lay the foundation for optimal patient follow-up by jointly designing the discharge summary document with hospital and emergency department physicians and by creating capacity in their clinic schedules to anticipate the need for post-discharge appointments.

Joint Design of the Discharge Summary Document

The primary care practice, hospitalists, and other hospital-based clinicians should agree on the content of information about the patient that needs to be shared, the format of the document, and the preferred methods for communication. The communication system should be designed as a two-way system so that information from the practice to the hospital can occur upon admission and as needed throughout the hospital stay (medications, prior treatment plans, social support information, etc.) and from the hospital to the practice upon admission, throughout the hospitalization (as needed), and at discharge. The following elements can be included in the agreement or protocol between the two parties:

1. The timing of communication concerning admission and discharge
2. How the information will be sent or transmitted (e.g., fax, cell phone, secure email, pager, directly from information system, etc.)
3. Who will be responsible for scheduling the post-hospital follow-up visit

4. What specific information will be included by each party on admission, during hospitalization, and upon discharge in the hospital discharge summary or emergency department (ED) visit summary

Practice and hospital clinicians and/or care team members may wish to visit each other's locations as a way to share information about their respective processes and to clarify and refine any communication issues.

Creating Access in Clinic Schedules

To provide timely access to care following a hospitalization, providers in an office practice must anticipate the needs of each patient and have capacity in their clinic schedules for the appropriate level of contact.

Practices can use a number of strategies for creating capacity in their clinic schedules to anticipate the need for post-discharge appointments. Practices with advanced clinic access systems have open appointment slots each day in their scheduling system to meet the same-day needs of all their patients, including those recently discharge from the hospital. Information on advanced access systems is available at

www.ihl.org/explore/PrimaryCareAccess/Pages/default.aspx.

Those practices without advanced clinic access can also take steps to ensure availability of post-hospital appointments by using a number of methods, including the following:

- Anticipate the needs of a hospitalized patient for follow-up: Using the two-way communication system outlined above would enable a practice's staff to know the approximate date of discharge, and give them time to hold an appointment slot (pending confirmation from the hospital of the actual day of discharge and from the patient of the day and time of the appointment).
- Use a "carve-out" system to reserve appointment slots: By analyzing its patient population (age, clinical conditions, patient complexity, etc.) and its past history of patient discharges, a practice can predict the number of post-hospital appointments that will be needed each week and "hold" appointment slots in the schedule in anticipation of patient discharges. This process should be tested and monitored within each practice to ensure that appointment slots are filled, so as not to jeopardize productivity standards and/or billing/reimbursement targets.

- Offer group visits for the first post-hospital appointment, especially for medium- or low-risk patients: This approach creates capacity in the clinic schedule by meeting the needs of a number of patients during the same appointment, thereby freeing up individual appointment slots for the clinician. The Family Practice Center at Maine Medical Center in Portland, ME, offers group visits at discharge and has seen a decrease in readmission rates for patients who selected a group visit versus those who chose a traditional follow-up appointment. More information is available at [www.familypracticenews.com/index.php?id=2633&cHash=071010&tx_ttnews\[tt_news\]=51764](http://www.familypracticenews.com/index.php?id=2633&cHash=071010&tx_ttnews[tt_news]=51764).
- Group visits can be organized for patients recently discharged with particular conditions (e.g., heart failure) or may include patients with varying clinical conditions (e.g., heart failure, COPD, etc.). If a practice has a relatively small demand for post-hospital appointments, then recently discharged patients can be included in already existing group visits that the practice may have established for all patients with chronic disease and/or the need for ongoing care and support.

For more information on creating access in clinic schedules, please see the following resources:

Assessing, Diagnosing, and Treating Your Outpatient Primary Care Practice. The Dartmouth Institute at Dartmouth Medical School. Available at <http://dms.dartmouth.edu/cms/materials/workbooks>.

Scheduling Systems to Build Clinic Availability. Institute for Healthcare Improvement. Available at www.ihp.org/knowledge/Pages/Changes/ReduceSchedulingComplexity.aspx.

Care Coordination Toolkit. Improving Chronic Illness Care. Available at www.improvingchroniccare.org/index.php?p=Critical_Tools&s=162.

Once the practice has systematized communications and ensured its ability to schedule patients for follow-up visits, it can then design an optimal system for actually providing timely and appropriate care following a hospitalization, and coordinating with other clinicians and support services for ongoing care. The processes described below are actions that the physicians and staff within a practice can take on a daily basis to ensure that the patient will receive the appropriate care on the day of the visit within the recommended time frame following a hospitalization.

Recommended Changes

1A. Review on a daily basis information received from the hospital about admissions and anticipated discharges.

To equip office practice providers with the ability to anticipate the needs of a patient at discharge, a designated care team member (e.g., nurse or other care team member) must regularly receive information from the hospitalist about the practice's hospitalized patients and must use a standardized approach to act on the information. Each practice will have to identify the appropriate staff member, taking into account its staff composition and current responsibilities. Resources from the Dartmouth Institute at the Dartmouth Medical School Clinical Microsystems are available at <http://dms.dartmouth.edu/cms/materials/workbooks> to help a practice gather information about current care team roles and responsibilities.

The process used by the designated team member will also vary from practice to practice depending on the mode of communication (e.g., office phone, fax, secure email, electronic health record, etc.) available at both the practice and the hospital. Below are some of the specific processes that a nurse or other staff person would follow to ensure that the practice has the information about patients who will be or are in the process of being discharged from the hospital:

- Check electronic transmission of information from the hospital or initiate daily contact with a designated hospital contact to obtain and act on information about the practice's hospitalized patients;
- Contact the designated hospital contact person (e.g., hospitalist, nurse practitioner on the hospitalist team, or nurse) to: a) clarify any information about patients' clinical status and needs at discharge, especially patients at high or moderate risk for readmission; and b) provide any additional information that might be needed about the patient to the hospitalist or hospital-based clinicians; and
- Include the hospital report in the patient medical record and share information during daily huddles with the physician and other members of the care team in preparation for the post-discharge visit.

Additional actions that a practice could explore and test with its hospital partner to enhance or refine the process outlined above include the following:

- Explore how the primary care physician might participate in the discharge process, e.g., attending the discussions about the patient's care plan before or during discharge, either in person or remotely.
- Explore how the practice can proactively provide the hospital(s) with a list of its high-risk patients so that staff at the hospital(s) can notify the practice on admission.
- Schedule regular meetings for the office practice and the hospital key contact to review individual cases and ensure coordination and communication.
- Place a liaison from the practice in the hospital. At Family Care Network in Whatcom County, WA, the liaison facilitates the coordination of care by sharing information about the patient with the hospital team, flags the admission in the practice information system, triages anticipated post-discharge issues to the office practice nurse, makes the patient follow-up appointment, and notifies the practice when the patient is discharged.

1B. Provide the appropriate level and type of follow-up for high-risk, moderate-risk, and low-risk discharged patients.

Patients who have been identified by the hospital clinicians as being at high risk for readmission should be seen by home health care or a primary care provider within 48 hours after discharge. Moderate-risk patients should receive a follow-up phone call within 48 hours and be seen by a physician (or other provider) within five to seven days. For those who are determined to be at a low risk for readmissions, an office visit should be scheduled per order of the discharging physician.

Although a number of risk-assessment tools are reported in the literature,⁷⁻¹³ there are inconsistencies regarding which characteristics and/or variables are most predictive. Figure 6 provides a practical way to assess the patient's risk for rehospitalization.

Figure 6: Categories of a Patient’s Risk of Rehospitalization

High-Risk Patients	Moderate-Risk Patients	Low-Risk Patients
• Patient has been admitted two or more times in the past year • 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	• Patient has been admitted once in the past year • 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	• Patient has had no other hospital admissions in the past year • Patient or family caregiver has a high degree of confidence and can Teach Back how to carry out self-care at home

Office practice staff and providers can use the following processes to ensure that patients receive the appropriate level of care and support:

Post-Discharge Phone Calls

Post-discharge follow-up phone calls have been frequently been cited as a cost-effective method to assess how the patient and family caregivers are managing self-care needs after discharge from the hospital. These phone calls are generally conducted by clinical staff in the hospital or in clinical settings outside the hospital (e.g., heart failure clinics or primary care), by advanced practice nurses or 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.

An office practice should know who is reaching out to their patients and avoid duplication. It is important that all providers discuss together who will be contacting the patient and the purpose of the call. Patient information and educational materials across providers should be consistent, redundant calls reduced, and patients made aware of who will be contacting them, for what purpose, and within what time period. Additional information on planning and activating follow-up phone calls for patients can be found in the article, “Enhancing the Effectiveness of Follow-Up Phone Calls to Improve Transitions in Care: Three Decision Points”

(www.ihl.org/knowledge/Pages/Publications/EnhancingEffectivenessFollowUpPhoneCallsImproveTransitionsCare.aspx).

Even if the primary care practice knows that the hospital or others may be conducting follow-up phone calls to high- and moderate-risk patients, they may still want to contact their patients following a discharge. The evidence is mixed about whether follow-up phone calls by hospital or case management personnel are effective in finding medication errors or reducing readmissions.¹⁴ A call from a primary care provider ensures that patients are contacted by someone they know and with whom they have a relationship. This communication provides an opportunity to adjust the risk assessment received from the hospital; establishes accountability of the practice for the patient; and ensures continuity in the patient education process that began in the hospital and will now continue in the outpatient setting.

At Cambridge Health Alliance clinics ([Cambridge Health Alliance](#), Case Studies, page 64), a primary care practice nurse contacts high-risk patients within 12 to 18 hours following discharge and moderate-risk patients within 48 hours to assess the patient's medical status, review the patient discharge information, elicit patient questions and concerns, confirm the scheduled follow-up appointment (made while the patient was in the hospital), and address other issues, such as medication refills or urgent appointments, as needed.

Post-Discharge Appointment

Ideally, patients are given their follow-up appointment before they leave the hospital. To accomplish this, the hospital can notify the practice about the need for an appointment and/or the primary care practice can contact the patient directly while he or she is in the hospital. The latter approach requires informing the practice that one of their patients is in the hospital and will require a follow-up appointment. This can be done through electronic communication, phone, or fax notification.

In either case, the practice needs to have several processes in place to ensure that a hospitalized patient receives a follow-up appointment as needed, depending on assessed risk for readmission and/or clinical need:

- Ensure that staff roles and responsibilities are clear (e.g., the nurse calls the patients either in the hospital or once they have returned home), and the scheduler identifies and/or creates open appointment slots in anticipation of the needs of discharged patients.

- Identify the key contact in the hospital for coordination of follow-up patient contact; provide a key contact from the office practice to the hospital.
- Use office practice staff huddles to discuss high-risk patients who do not show up for scheduled appointments. Assign responsibility to a care team member to follow up with these patients.

Additional processes that a practice and its hospital partner might explore to further streamline the post-discharge visit process include:

- Provide the hospital contact person and/or patients and family members with online access to the office practice so they can directly schedule follow-up appointments.
- Customize the process to the needs or preferences of the patient, e.g., some patients may want to schedule the follow-up appointment themselves once they are home. In such a case, the office practice will need to be aware of this so that appropriate follow-up contact is made following discharge.

Suggested Measures

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

- Percent of patients who have a scheduled follow-up appointment at the time of discharge
- Percent of patients who are seen in an appropriate time frame following a hospitalization (i.e., 24 to 48 hours for high-risk, 5 days for moderate-risk, and at the provider's discretion for low-risk patients)
- Percent of eligible patients (i.e., Medicare fee-for-service patients within 30-day post-hospital discharge period) for whom the practice billed for compensation under the CMS transitional care management (TCM) benefit (discussed above on page 4)

2. Prior to the Visit: Prepare Patient and Clinical Team

Recommended Changes:

- 2A. Review the discharge summary.*
- 2B. Clarify outstanding questions with sending physician(s).*
- 2C. Place a reminder call to the patient or family caregiver to help them prepare for the visit.*
- 2D. Coordinate care with home health care nurses and case managers, if appropriate.*

At the time of the first post-discharge office visit, the physician checks that the treatment plan and medications ordered at discharge match his or her assessment of the patient's current clinical condition. The physician and care team also ensure that the patient and family members are actively engaged in creating the care plan and capable of implementing it after discharge.

Recommended Changes

2A. Review the discharge summary.

To adequately re-evaluate the patient's clinical status, the outpatient physician needs key pieces of information from the discharge summary in preparation for the first post-discharge visit. He or she also needs to be able to obtain additional information from the discharging physician.

Prior to the visit, the patient's physician reviews the patient discharge information, anticipates the needs of the patient, and identifies any issues that should be taken into consideration in creating a new treatment plan for the patient. At the first post-hospital visit, the office practice physician most likely does not need the detailed discharge summary document from the hospital. Even practices that have access to the discharge summary may want to focus on the key pieces of information that the primary care clinician needs at the time of the visit. Distinguish between the "vital few" pieces of information needed to care for the patient at the first discharge appointment versus the entire discharge summary, which may contain more information than is necessary. (For examples of patient discharge information being used by primary care providers, please see the [Cambridge Health Alliance](#) and [Allina Health](#) case studies, pages 64 and 70 respectively.

The other members of the care team may be involved in regularly obtaining the discharge information from the hospital, and in using the information to anticipate the needs of the patient on the day of the visit. Physicians and care team members can use daily team “huddles” or briefings to review the cases patients listed on the day’s schedule, including patients recently discharged, in order to identify patient needs prior to the office visit. More information about care team huddles is available at www.ihl.org/knowledge/Pages/Tools/Huddles.aspx.

For more information on the transfer of information to the next clinical care provider(s), please refer to the following resources:

Project BOOST: Better Outcomes for Older Adults through Safe Transitions. Society of Hospital Medicine. Available at www.hospitalmedicine.org/BOOST. Includes a care transitions resource, which focuses on essential elements for improving the discharge process. The program recommends direct communication with provider before discharge; telephone contact within 72 hours post-discharge to assess condition; discharge plan comprehension and adherence to follow-up instructions; and direct contact information from hospital personnel familiar with the patient’s course.

Implementation Guide. Project BOOST, Society of Hospital Medicine. Available at http://tools.hospitalmedicine.org/resource_rooms/imp_guides/CT/Implementation_Download.html.

Snow V, Beck D, Budnitz T, Miller D, Potter J, Wears R, Weiss K, Williams M. Transitions of Care Consensus Policy Statement. *Journal of Hospital Medicine*. July/August 2009;4(6): 364-370.

Safe Practices for Better Healthcare. Institute of Medicine, 2010. Available at: [www.qualityforum.org/Publications/2010/04/Safe Practices for Better Healthcare – 2010 Update.aspx](http://www.qualityforum.org/Publications/2010/04/Safe_Practices_for_Better_Healthcare_-_2010_Update.aspx). Includes a standard list of eight items that should be included in the handoff to the community clinical provider who accepts the patient’s care after hospital discharge.

2B. Clarify outstanding questions with sending physician(s).

As the office practice physician or clinician reviews the discharge information, he/she may have questions for the sending physician. The office practice clinician and the hospitalist or other hospital-based provider should establish a mutually agreed upon method of communication to facilitate the transfer of clarifying information to the office practice physician or other clinician.

Whether the preferred method is phone, secure email, or some other type of communication, there should be a clear process to follow when the need arises. The discussion about the preferred method of communication can occur at the same time that agreement is reached about the transfer of the discharge summary information.

2C. Place a reminder call to the patient or family caregiver to help them prepare for the visit.

The reminder call to the patient can be made by the physician or another member of the care team. The purpose of the call is to:

- Emphasize the importance of the visit and ensure that the patient will be able to come to the office on the day of the appointment (e.g., the patient has transportation, etc.).
- Remind the patient to bring his or her list of medications as well as the medications themselves, both over-the-counter and prescription medications that he or she is currently taking. Short of visiting patients at home, having them bring their medications to the office is the best way to reconcile what the physician thinks they are taking with what they really are taking everyday. The physician or other care team member can also use the review of the medications to explore patients' understanding of their medications and reinforce any teaching that may have been done in the hospital.
- Make sure that patients know whom to contact for an emergency or to ask a question about their medications or self-care instructions.

2D. Coordinate care with home health care nurses and case managers if appropriate.

In addition to reviewing the discharge information from the hospital, the office practice physician or clinician may want to obtain information from home health care nurses or non-clinic-based case managers. The home health care nurse may have information about the patient's condition and medications prior to hospitalization, and/or may have conducted the patient's first post-hospital visit prior to the patient's office visit. Case managers would also have additional information about the patient's status at discharge, ability for self-care, and any family or social issues that would affect the physician's assessment of the patient's needs at the time of the visit. As with the hospitalist or hospital-based clinician, there should be a mutually agreed upon process to easily share information between the office practice physician or other care team members and home health care, case managers, and/or other community-based providers or services.

Suggested Measures

Use these measures to determine the reliability of your processes for preparing the clinical team prior to the first post-hospital visit:

- Percent of patients who received a reminder call prior to their first post-hospital office visit
- Percent of first post-hospital visits for which the physician had the discharge summary available at the time of the visit

3. During the Visit: Assess Patient and Initiate New Care Plan or Revise Existing Plan

Recommended Changes:

3A. Ask the patient about his/her health-related goals.

3B. Ask the patient to describe in his/her own words the factors that contributed to the hospital admission or emergency department visit.

3C. Perform medication reconciliation with attention to the pre-hospital regimen.

3D. Determine the need to adjust medications or dosages, follow up on test results, do monitoring or testing, discuss advance directives, and discuss specific future treatments and additional care support that may be needed.

3E. Instruct patient in self-management and have patient repeat back the instructions.

3F. Explain warning signs and how to respond and have patient repeat back this information.

3G. Provide instructions for seeking emergency and non-emergency after-hours care.

The first post-hospital visit is a key touch-point for patients with their primary care provider (or specialist, depending on the clinical condition and the needs of the patient). The evidence is mixed concerning the effect of post-discharge follow-up visits on readmission rates. While some

studies report that post-discharge visits contribute to lower readmission rates,^{15,16} others have found no difference or an increase in readmissions.^{15,17}

Coleman⁶ suggests that systematizing cross-setting communication between providers and specifying what should happen during the visit are two key variables that may contribute to post-hospital visits that help keep patients from an avoidable rehospitalization.

Each practice will need to determine the best way for them to organize staff and clinician roles within the practice to accomplish the recommended changes described in this section of the How-to Guide. For example, medication reconciliation might be performed by the physician or by a pharmacist depending on the staff composition of the practice. Patient teaching and enhancing patient self-management skills may be done by a nurse, health educator, medical assistant, and/or a lay volunteer. The ability of the practice to redesign workflow and assign staff are enhanced by the practice's participation in redesign and improvement efforts, such as patient-centered medical home (PCMH) initiatives.¹⁸

Recommended Changes:

3A. Ask the patient about his/her health-related goals. / 3B. Ask the patient to describe in his/her own words the factors that contributed to the hospital admission or emergency department (ED) visit.

Starting the visit by asking the patient what is important to him/her helps the physician and the care team to develop a care plan with the patient that will meet his/her needs and that the patient and/or family members have had a role in creating. The discharge summary does not usually contain information from the patient's perspective about what contributed to the hospital admission or ED visit. Although hospitals that conduct enhanced assessments of the patient on admission will have this information and ideally would include it in the discharge summary,¹⁹ the office visit provides the physician with an opportunity to verify the information and perhaps deepen his/her understanding of the patient's experience.

3C. Perform medication reconciliation with attention to the pre-hospital regimen.

During the post-discharge visit, the physician uses information from the patient and the clinical exam, and relevant information from the patient discharge information, to create a treatment plan and medication list. Medication reconciliation is an especially important part of this process. Failure to build a reliable process for medication reconciliation that involves the patient and family members can contribute to medication errors and can increase the risk of readmission to

the hospital.²⁰⁻²³ A comprehensive medication reconciliation should begin with the physician or nurse practitioner asking the patients to say in their own words what medicines they are taking and when they are taking them. This is often the best way for the clinician to get accurate information, rather than relying on a record of the medications ordered at discharge. The clinician can then identify and address discrepancies based on all relevant information: what the patient says he/she is taking, what was ordered at discharge, and what the medication regimen was prior to the hospitalization.

The physician or nurse practitioner may find it helpful to use a standard medication reconciliation form to identify any unexplained discrepancies in pre-hospitalization and post-discharge medications. Examples are available from the Massachusetts Coalition for the Prevention of Medical Errors at www.macoalition.org/Initiatives/RMToolkit.shtml.

For more information on reconciling medications, please see the following resources:

How to Create an Accurate Medication List in the Outpatient Setting through a Patient-Centered Approach. Consumers Advancing Patient Safety. Available at <http://patientsafety.org/page/109587>.

Reducing Medication Errors in Ambulatory Settings – Medication List. Massachusetts Coalition for the Prevention of Medical Errors. Available at www.macoalition.org/reducing_medication_errors.shtml.

3D. Determine the need to adjust medications or dosages, follow up on test results, do monitoring or testing, discuss advance directives, and discuss specific future treatments and additional care support that may be needed.

During the visit the physician creates a treatment and medication plan and develops, together with the patient and/or family members, an overall care plan. Based on the discharge summary, the medication reconciliation process, and the clinical exam, the physician will determine the need to adjust medications or dosages, follow up on test results, and order additional monitoring or testing.

The patients and/or family members need to understand the recommended care plan and know what actions they need to take to care for themselves. The physician or other care team member asks the patient what is important to him or her in the coming weeks, and any questions or concerns he or she might have about the treatment plan. Clearly reviewing the care plan with the patient helps to foster agreement on specific forms of follow-up contact and

support, such as case management for 8 to 12 weeks following discharge or use of telemonitoring, and also identifies any unaddressed needs for the patient – such as a scale for weight monitoring – to follow the care plan.

When warranted by the patient's clinical condition, the physician discusses the patient's wishes for end-of-life care, explaining probable progression of his or her disease and ascertaining the patient's choices about potential treatment and care options. Information and resources about palliative care are available on the Center to Advance Palliative Care's website www.capc.org. (For an example of embedding a palliative care nurse in a primary care practice, see [The Everett Clinic](#), Case Studies, page 60.)

3E. Instruct patient in self-management and have patient repeat back the instructions.

Studies have shown that patients who are actively engaged in managing their care have fewer hospitalizations, enjoy an improved quality of life, and experience better clinical outcomes.²⁴ For example, research has shown that effectively engaging and partnering with patients with conditions such as heart failure who are at increased risk for hospitalizations can help improve care.^{25,26} Provider assessment and understanding of the patient's wishes and ability for self-care are crucial steps in engaging patients.

The ability to understand and follow the instructions to take medications as prescribed, manage diet and other daily activities, and know when to ask for additional help is an essential component of patient engagement. Members of the care team, including the physician, can best determine a patient's ability to follow through on plans made during an office visit with a planned discussion at the time of the visit. Based on the patient's goals and understanding of the factors that contributed to his/her recent hospitalization, the physician or other member of the care team explains the recommended treatment plan to the patient and family caregivers, making the link between what the patient may have been told at discharge and any adjustments now being recommended by the primary care physician.

The Ask Me 3TM method is useful in organizing the key information that patients need to know. It outlines three simple but essential questions that patients should ask their providers to formulate for patient teaching. Teach to the patient's three questions: 1) What's my main problem? 2) What should I do for that problem? and 3) Why is that important? Ask Me 3TM also encourages patients to advocate for this information and urges providers to maximize patient and family understanding.²⁷

The Teach Back process is helpful in identifying and addressing any gaps between the patient's and/or family member's level of understanding and their ability to care for themselves or the patient.^{28,29} Teach Back involves asking patients or family caregivers to recall and restate in their own words what they heard during education or other instructions:

1. The clinician asks in a non-shaming way for the individual to explain in his or her own words what he/she understands.
2. Once a gap in understanding is identified, the clinician offers additional teaching or explanation followed by a second request for Teach Back. "Return demonstration" or "show back" is another form of "closing the loop," in which the clinician asks the patient to demonstrate how he or she will do what was taught.³⁰ This technique is used routinely in diabetic education and physical therapy.
3. The clinician assesses the patient's ability and confidence to perform self-care practices, including use of medications, diet, nutrition, symptom awareness and management, tobacco and alcohol use, activity, and reasons to call the physician (e.g., pain, weight gain, difficulty breathing, or exhaustion).^{13,31}
4. The clinician documents and communicates information about the patient or family member's understanding and goals to the care team and incorporates them into the patient's overall care plan.

The following tips will help patients and clinic staff effectively use Teach Back:

- Identify the key learners, such as patient, family members, and friends. If the patient has limited cognitive capability, he/she may not be the key learner.
- Use standard or complimentary material that the patient received either while in the hospital or at discharge. Office practices with limited resources should utilize already existing material, especially from their local hospital(s). Standardizing material across settings in a community is not only cost-effective but is also key to reducing confusion among patients and reinforcing teaching at each site where the patient interacts with the health care system. A tool that can be helpful in standardizing teaching content across settings is shown in Figure 7. It identifies the key pieces of information that patients should understand for the most frequent clinical conditions.

Figure 7: [Key Educational Topics for High-Volume Clinical Conditions](#) (How-to Guide Resources, page 87)

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	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	Tell me how you would describe your condition to someone.

- Ask patients or family members how they learn best (e.g., discussion, written materials, videos) and tailor teaching methods to their preferences.
- Use health literacy training tools to raise staff awareness about the challenges patients face in understanding their conditions and instructions provided by clinicians. Information about how to integrate health literacy into a busy office practice can be found at www.ahrq.gov/qual/literacy.
- Initially, practice Teach Back and other teaching methods with the last patient of the day to reduce disruption to the schedule while developing the new technique.

For more information on patient self-management and using health literacy principles and Teach Back, please see the following resources:

Always Use Teach-Back Training Kit. Available at www.teachbacktraining.com
Agenda-Setting Communication Cards. Design Council. Available at www.designcouncil.org.uk/Case-studies/Diabetes-management/The-first-idea/.

Ask Me 3 Communication Tool, Posters and Brochures. National Patient Safety Foundation. Available at www.npsf.org/askme3.

BOOST Toolkit (includes Teach Back). The Society of Hospital Medicine BOOST. Available at http://www.hospitalmedicine.org/ResourceRoomRedesign/RR_CareTransitions/html_CC/12ClinicalTools/01_Toolkits.cfm.

The Care Transitions ProgramSM: Transitions Coach. Available at www.caretransitions.org.

Simplified Heart Failure Patient Teaching Materials. University of North Carolina at Chapel Hill. Available at www.nchealthliteracy.org/communication.html. The patient-friendly teaching materials, *Heart Failure Self-Management – Caring for Your Heart: Living Well with Heart Failure*, include detailed images and clear, easy-to-read language.

Easy-to-Read Written Materials. US Health Resources and Services Administration. Available at www.hrsa.gov/healthliteracy. The health literacy section of the website contains free and easy-to-read health brochures and information in various languages.

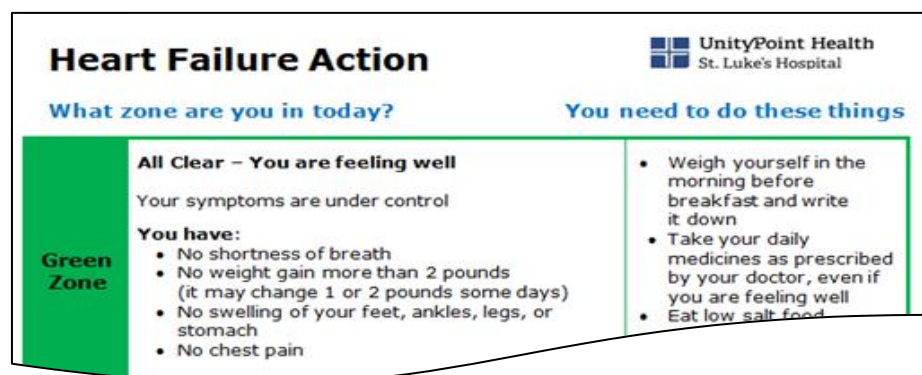
3F. Explain warning signs and how to respond and have patient repeat back this information.

The warning signs that patients should be aware of will differ from condition to condition. Providing patients and family members with easy-to-read instructions and tools can help patients safely monitor their symptoms and know when to contact the physician's office when appropriate. Examples of such tools are given in Figure 8 and Figure 9.

Figure 8: [Heart Failure Magnet - St. Luke's Hospital](#) (How-to Guide Resources, page 89)



Figure 9: [Heart Failure Zones - St. Luke's Hospital](#) (How-to Guide Resources, page 90)



3G. Provide instructions for seeking emergency and non-emergency after-hours care.

Patients must not only know when to contact a physician for medical attention; they also need clear instructions on how to do so. If a need should arise during office hours, patients can be given a specific number so that they can reach the appropriate care team member for emergency or non-emergency issues. For after-hours care, patients should know who to call and how to communicate that they are in an emergency situation. If the patient is being seen by multiple providers (e.g., specialists, palliative care, etc.), the providers should coordinate their instructions to the patient in order to eliminate any confusion for the patient and/or family members. Teach Back can also be used at this time during the visit to ensure that the patient fully understands how to obtain medical help in emergency and non-emergency situations both during and after regular office hours. Care team members may consider using what they learn about the patient's ability to repeat back these instructions for after-hours care as one indication of the patient's overall ability to self-manage following the office visit.

Suggested Measures

Use these measures to determine the reliability of your processes for conducting the first post-hospital office visit:

- Percent of patients who can Teach Back the medications they should take at home, including dosage and time
- Percent of patients who can Teach Back the warning signs they should watch for and how to respond

4. At the Conclusion of the Visit: Communicate and Coordinate the Ongoing Care Plan

Recommended Changes:

4A. Print reconciled, dated medication list and provide a copy to the patient, family caregiver, home health care nurse, and case manager, if appropriate.

4B. Communicate revisions of the care plan to patient, family caregiver, home health care nurse, and case manager, if appropriate.

4C. Ensure that the next appointment is scheduled, as appropriate.

Too often, patients receive care that is fragmented and episodic. The first post-hospital office visit is an important touch point to ensure that information about the patient and his/her care plan is clearly communicated to the patient and to any other providers and/or community-based supportive services who know the patient. The need for coordinated care is particularly acute for patients with chronic conditions or complex clinical needs.³² Studies have shown that many of the factors that lead to hospitalization or rehospitalization can be prevented or mitigated by proactive, comprehensive, and coordinated care in the community.³³⁻³⁶ For this reason, care coordination is especially important for patients recently discharged from the hospital.

Recommended Changes:

4A. Print reconciled, dated medication list and provide a copy to the patient, family caregiver, home health care nurse, and case manager, if appropriate.

The reconciliation of medications that the patient was taking before and after discharge is an important component of what happens during the office visit (see above in section 3B. *Perform medication reconciliation with attention to the pre-hospital regimen*). A printed copy rather than a hand-written one reduces the risk of confusion or errors in reading the medication list. It is important that the medication list be dated so that it doesn't become confused with other lists that the patient may have at home. Printed lists can be generated automatically from an electronic medical record or from other electronic means using a template.

See references in section 3B above for examples of standard medication forms that can be used to simplify the process of compiling a record of the reconciled medication list. The list should be handed to the patient and/or family caregiver at the conclusion of the visit and sent to all other providers who are caring for the patient. It can be sent together with the care plan as described below. See the [Allina Health Case Study on page 70](#) for an example of an electronic After-Visit Summary that contains an up-to-date medication list as well as other information that the patient needs following the office visit.

4B. Communicate revisions to the care plan to the patient, family caregiver, home health care nurse, and case manager, if appropriate.

Patients at high risk of readmission often have multiple clinical conditions and are treated by a number of different clinicians. Following the post-discharge visit, send updated information about the patient's treatment plan and medications, especially any changes in the patient's condition and ability to care for him/herself, to all providers caring for the patient. The office practice should designate a team member to be responsible for sending the care plan developed at the first post-discharge office visit as well as the reconciled medical list to other clinicians and providers in the community, highlighting any changes in medications since discharge. Some considerations in developing this process include:

- Ensure that primary care providers and specialists (and/or others who will be receiving the care plan) agree on a preferred method of communication (e.g., fax, secure email, etc.). More information is available at www.ihl.org/knowledge/Pages/Tools/ServiceAgreementYellowCard.aspx.
- There should also be a mutually agreed upon method of communication for providers to follow up with each other with questions after the receipt of the care plan.
- Ensure that all providers agree on a timeframe for the physician who is conducting the post-discharge exam to send an updated care plan (e.g., before the end of the same day).
- If the patient is having difficulty reading or understanding instructions, ensure that the physician conducting the post-discharge exam notifies other providers so they can be prepared to better assist the patient during the next interaction.

- Consider developing a community-wide Shared Care Plan that is accessible to all providers as well as patients. More information is available at www.stepsincheswhatcom.org/learn/resourcesptsfam.cfm.

The patient and/or family member should also receive a copy of the care plan at the conclusion of the office visit and should have the opportunity to ask any outstanding questions (following the Teach Back educational session held during the office visit itself).

The primary care office is both a sender and receiver of information about its patients (i.e., will want to receive notifications of any adjustments in the medication regimen or care plan from specialist, etc.). Accordingly, the team should design a process within the office to optimally coordinate the incoming as well as the outgoing communication with other clinicians and providers. For example, the team will need to decide on the best method for the nurse to inform other care team members of information received from skilled nursing facilities or home health agencies and/or for adding this information to the patient's medical record, etc.

Practices involved in PCMH initiatives,⁵ as well as those working to achieve Meaningful Use designation, will find synergy between these initiatives and their efforts to share information about the patient's care plan with both patients and other care providers.

Additional information about resources to support the implementation of health information technology in office practices and to meet Meaningful Use criteria is available at www.healthit.gov/.

4C. Ensure that the next appointment is scheduled, as appropriate.

At the conclusion of the office visit, the patient should also receive an appointment for his/her next office visit or phone contact. The care team should also arrange for any additional support services that might be needed following the visit (e.g., behavioral health or substance abuse services, meals on wheels, social support, financial assistance, housing assistance, or help with transportation) and inform the patient of the scheduled services.

For more information on what happens at the conclusion of the office visit, please see the following:

Reducing Care Fragmentation: A Toolkit for Coordinating Care. Improving Chronic Illness Care. Available at

www.improvingchroniccare.org/downloads/executive_summary_reducing_care_fragmentation_.pdf.

Suggested Measures

Use these measures to determine the reliability of your processes for concluding the first post-hospital office visit:

- Percent of patients who leave the first post-hospital visit with a printed and reconciled medication list
- Percent of patients who leave the first post-hospital visit with a printed care plan

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

The challenge for health care leaders, “Start Before You Are Ready!,” has been stated by Jim Anderson, former Chairman of the Board at Cincinnati Children’s Hospital and Medical Center. Figure 10 is a document that was adapted for improving care transitions from the Cincinnati Children’s Hospital readiness assessment for *Partnering with Patients and Families to Accelerate Improvement*.

Figure 10. [Readiness Assessment](#) (How-to Guide Resources, page 98)

**Partnering with Patients and Families to Accelerate Improvement
Readiness Assessment**

Name of Organization _____

Area	Current Experience: make a mark (an X, a circle, or anything that is easy to read) in the box that best describes your team or organization's experience.		
Data transparency	We have not discussed the possibility of sharing performance data with	Our team is comfortable with sharing improvement	

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

- 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.ihl.org/knowledge/Pages/Publications/PartneringwithPatientsandFamilies.aspx.

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

Berwick D. What 'patient-centered' should mean: Confessions of an extremist. *Health Affairs (Millwood)*. 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 www.ihl.org/knowledge/Pages/Publications/PursuitGenuinePartnershipswithPatientsFamily.aspx.

Cross-Continuum Team Collaboration

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

Leadership for successful cross-continuum teams varies. Some are initiated by hospital executives who invite representatives from community-based sites of care and community agencies that 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 to 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 others' 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
 - Rotate meetings in the different sites.

Portfolio Management

- Review the comprehensive results and progress over time and support the work of front-line clinicians and staff in the hospital, office practice settings, home health care, and

skilled nursing facilities in the co-design and implementation of processes to improve transitions in care.

- Manage a portfolio of community-wide improvement initiatives and review progress of each initiative. Examples of community-wide initiatives include:
 - Create universal handover forms/formats to improve communication and coordination of patient care among all clinical settings;
 - Develop a common evidence-based patient education approach in all clinical settings (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 the exchange of electronic information within and across settings in a community (i.e., interoperability) can have a dramatic effect on the coordination and communication of information among providers and between providers and patients. While hospitals have had electronic systems to support financial and management systems for a long time, fewer have electronic clinical information systems that support quality of patient care.³⁷ Other settings across the continuum of care have only recently begun to adapt and implement HIT systems that include clinical information.³⁸ 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 2) are addressed in this section of the How-to Guide.

Transition from Hospital to Home

During the hospitalization, the ability of clinicians and staff to complete an enhanced assessment and create a post-discharge care plan can be done more consistently and easily if they have immediate access to information about the patient from a number of sources, including primary care and other community providers as well as from members of the care team within the hospital. Medication reconciliation is more effectively accomplished with shared access to patient records across providers. Information gained about the patient during Teach Back sessions, whether conducted in the hospital or in the primary care office, can become part of a continuous documentation of a patient and the family caregivers' ability to understand how to take care of the patient with the use of shared information systems.

Virginia Mason Medical Center (VMMC) has built transitions in care information into its electronic medical record system. As part of its Depart process, information about the patient is collected and shared across hospital settings and with primary care to better identify and plan for the discharge needs of the patient and family members. Shared care plans, such as the Patient Powered system developed in Whatcom County, Washington, can be the vehicle for engaging patients in the development of their care plans and also in the active management of their health in an ongoing way. With shared care plans, patients have direct access to their medical information and designate others with whom they want to share the information.

Transition to Community Care Settings

The ability of clinicians and staff in skilled nursing facilities, home health care, and primary care practices to effectively receive the patient following a hospitalization depends on their having access to information about the patient's course of treatment and the care plan developed during 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. Allina Health has used its Epic-based electronic health record to create a brief discharge report for outpatient-based clinicians. See details

about the Recommendations for the Outpatient Provider (ROP) in the [Allina Health Case Study on page 70 of this Guide](#).

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 to the level of patient activation.

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

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

Supplemental Care for High-Risk Patients

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

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

released a Request for Information (RFI) on Governance of the Nationwide Health Information Network to a common set of “rules of the road” for privacy, security, business and technical requirements that will help create the necessary foundation to enable the nation’s electronic health information exchange capacity to grow.³⁹

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

This section lists steps to help office-practice-based teams create an ideal transition to the clinical office practice for patients being discharged from the hospital.

Step 1. Identify Executive Leadership at the Practice and/or Organizational Level

Clinical and/or administrative leader(s) are needed to link the work of reducing readmissions to the strategic priorities of the practice, provide guidance to the work, and ensure that sufficient staff time and resources are allocated to support the work. Typical leaders in various office practice settings might be a physician from a solo or small practice, a medical director of a large practice or community health center, or an administrative director or practice manager.

If reducing readmissions and improving transitions lack strategic priority, the chances of achieving lasting results lessen. These strategic questions may help frame the initiative for the practice:

- Is reducing the hospital’s readmission rate a strategic priority? What competing commitments might interfere with this work?
- What initiatives or other projects to reduce readmissions are already underway or planned? Are they aligned?
- What resources and expertise in quality improvement and data analysis can be utilized to support the effort?
- How will leaders provide oversight and accountability for the improvement projects?

Additional guidance for leaders of improvement initiatives is given in IHI's white paper, *Execution of Strategic Improvement Initiatives to Produce System-Level Results*.⁴⁰

Step 2. Form a Team

Whenever possible, office practices should create (or participate in) a team that includes representatives from across the care continuum, such as hospital staff, home health care nurses, skilled nursing facility staff, community service providers, pharmacists, ambulance services, palliative care and hospice services, and patients and family members. By understanding the interdependencies between the “sending location” and the “receiving location” of care, the team can work collaboratively to create ideal transitions. Together, members of the team will learn how to improve handoffs during transitions of care. In some cases, participation in a patient-centered medical home (PCMH) initiative in a community or region provides an individual practices not only an opportunity to collaborate with other practices but may also connect them with hospitals and other community providers and resources.

Whether or not they are part of a larger community or regional effort, practices need a practice-level team that includes patients and family members as well as clinicians and staff members from their own office practice or clinic. Consider choosing team members from the groups listed below.

Please note that the composition of the improvement team will depend on current staffing levels (e.g., small practices and clinics often are staffed by a single physician and medical assistant and/or receptionist).

- Patients and family members (*ideally these are not retired health care professionals*)
- Physicians
- Nurse practitioners
- Nurses and care managers
- Office managers
- Medical Assistants
- Schedulers and/or Receptionists

- Others (e.g., social workers, pharmacists, community volunteers, etc.)

Patients and families bring invaluable contributions to any improvement team.^{41,42} For more information on including patients and families, please refer to the following resources:

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.ihl.org/knowledge/Pages/Publications/PartneringwithPatientsandFamilies.aspx.

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

For more information on forming an improvement team, please refer to the following resource:

How to Improve: Forming the Team. Institute for Healthcare Improvement. Available at www.ihl.org/knowledge/Pages/HowtoImprove/ScienceofImprovementFormingtheTeam.aspx.

Step 3. Identify Opportunities for Improvement

Step 3a. An in-depth review of the last five patients from your practice who were rehospitalized within 30 days of discharge yields rich information.

The Diagnostic Worksheet below helps make sense of these findings (Figure 11). Use the Worksheet either during an office visit (preferable) or as a phone interview.

Figure 11: [Diagnostic Worksheet: Interviews with Patients and/or Family Members about a Recent Rehospitalization](#) (How-to Guide Resources, page 83)

Diagnostic Worksheet: Interviews with Patients, Family Members and Care Team Members about a Recent Rehospitalization

Ask Patient and/or Family Members:
How do you think you became sick enough to be readmitted to the hospital?

St. Luke's Hospital in Cedar Rapids, Iowa, Diagnostic Review 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 emergency 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 <http://kpcmi.org/news/ethnography/video-ethnography-tool-kit.pdf>.

Step 3b. Review patient experience data regarding communications and preparations for self-care and identify opportunities for improvement.

When possible, use currently available data that capture the patient experience of care, and select questions that best reflect patients' perceptions of how well the care team provided

them with needed information and how well prepared patients are to take care of themselves following a visit.

A patient experience survey for office practices, the CAHPS Clinician & Group Surveys (CG-CAHPS), is now available for use. Based on the HCAHPS (www.hcahpsonline.org/home.aspx) survey that is widely used to capture information from hospitalized patients about their experience, CG-CAHPS may be a useful tool for office practices. For information about the CG-CAHPS survey please go to www.cahps.ahrq.gov/.

If patient experience data is not readily available, consider asking one or two simple questions of all patients in your practice for a week. Some questions to consider include:²⁴

- *“How confident are you that you can control and manage most of your health problems?”*
Patients may respond: *very confident, somewhat confident, not very confident, or I do not have any health problems.*
- *“In general, how would you rate the information you receive from your doctor or nurse?”*
Patients may respond: *excellent, very good, good, fair, poor, or I do not remember receiving any information.*

Step 3c. Trend the 30-day all-cause readmission rates and/or the number of patients in a practice that were admitted to a hospital each month in a time series chart.

Readmission data are often difficult for office practice staff to obtain unless the practice is part of an integrated delivery system that provides access to hospital admission and discharge data. Teams in practices that are not affiliated with an integrated delivery system can determine the best methods and processes for gathering data and monitoring trends in readmissions through further study and testing. Practices that are able to obtain data on their rehospitalized patients can look for trends by displaying their readmission rates and number of readmissions over time.

Recommended Readmission Measures

- 30-day all-cause readmissions
- Readmissions count
- 30-day all-cause readmissions for a specific clinical condition (optional)

Please note that descriptions of these measures are provided in the [Data Reporting Guidelines for Office Practices: Outcome Measures](#) chart.

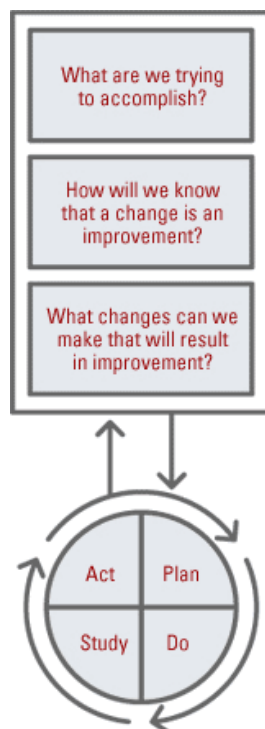
Step 4. Use the Model for Improvement

Developed by Associates in Process Improvement, the Model for Improvement (Figure 12) 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 12: The Model for Improvement



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

Question 1: What are we trying to accomplish?

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

An example of a clear aim statement for an office practice is:

Within the next 12 months, our practice will decrease rehospitalizations for our patients by at least 30 percent by focusing on the immediate post-hospital needs of the patient, including providing timely access to care following a hospitalization, ensuring that the post-hospital visit addresses the clinical and social needs of the patient, and communicating and coordinating the plan for ongoing care with the patient and family and other care providers.

For more on setting aims, refer to:

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

How to Select a Pilot Population

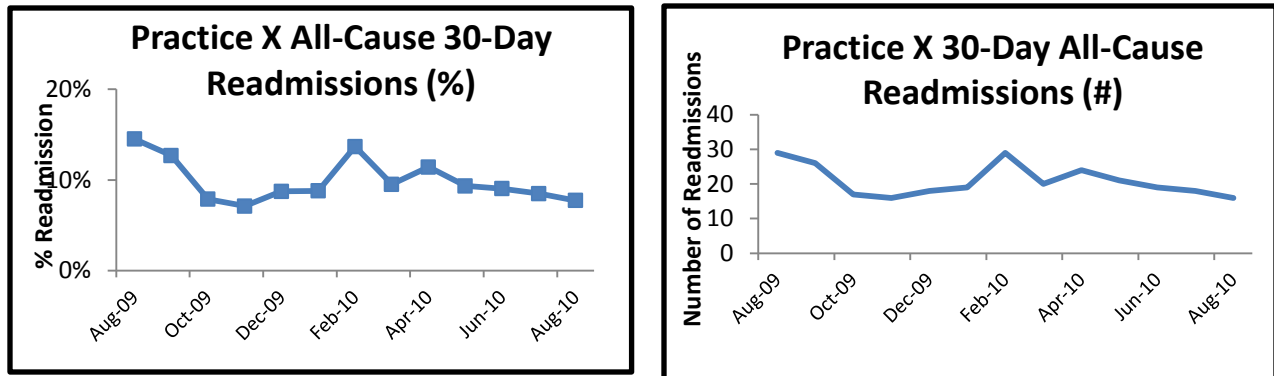
Based on what is learned about 30-day all-cause readmission data in Step 3 above, select a subpopulation of patients from the practice for your initial area of focus. If possible, focus improvement efforts for the patients that represent about half the hospital readmissions in your practice, and then later expand and spread improvements to all patients. For example, an office practice team may want to start their improvement work by focusing on patients with heart failure since these patients are frequently readmitted. If there are few readmissions or a very small patient segment representing half the readmissions, the practice would simply begin working to reducing all readmissions and improve transitions in care when patients are discharged.

Question 2: How will we know 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 (e.g., the percent of patients who can “teach back” the medications they should take at home, including dosage and time). Balancing measures help ensure that the changes we’re making are not causing detriment to

another important part of the system (e.g., extending the length of the clinic day in order for the care team to complete all the recommended changes for the first post-discharge visit). When data is displayed in a time series graph or in a run chart, trends and improvement are easy to observe (see Figure 13).

Figure 13: Example Run Charts for Outcome Measures for Readmissions

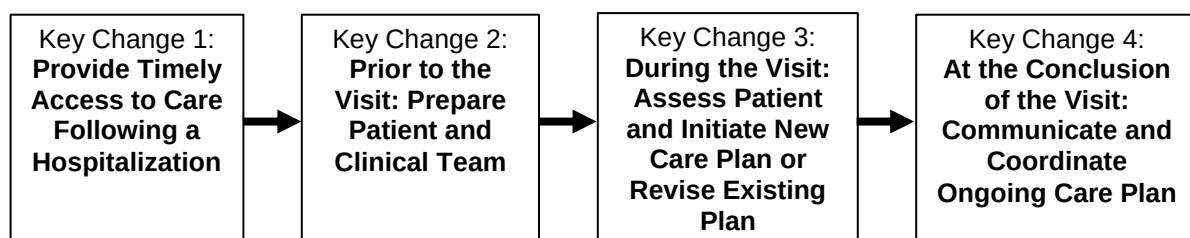


A comprehensive list of all of the measures can be found in the [How-to Guide System of Measures section](#).

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

Select the changes needed to bring about improvement from among the Key Changes outlined in Section II. The key changes reflect the temporal journey of a patient following a hospitalization and are illustrated in Figure 14.

Figure 14: Flowchart of Key Changes



First, the patient needs follow-up contact and a scheduled visit with his/her primary care or specialty care provider following a hospitalization. Second, in order to be fully prepared for the visit the patient needs to know that the physician and care team are expecting them for their post-hospitalization visit on a designated day and time; the care team needs to receive information about the patient from the hospitalist or other hospital-based clinician. Third, on the

day of the visit the patient learns more about their condition, contributes to their care plan, and leaves with confidence that they can either take care of themselves or receive additional support. Fourth, the patient receives information to take home, including medication regimens and information about whom to call in an emergency; and is assured that their other care providers are given updated information about them. All changes should be reliably implemented across the entire office practice or clinic following their being tested and implemented in the pilot area of focus — that is, the sub-population of patients selected by the practice as discussed above under Question 1 of the Model for Improvement.

Using PDSA Cycles for Learning and Improvement

The engine of improvement is the Plan, Do, Study, Act cycle. A team conducts 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.

Additionally, observation may inform improvement because it yields significant learning as a team tests and then implements changes.⁴³⁻⁴⁶

Why Test Changes?

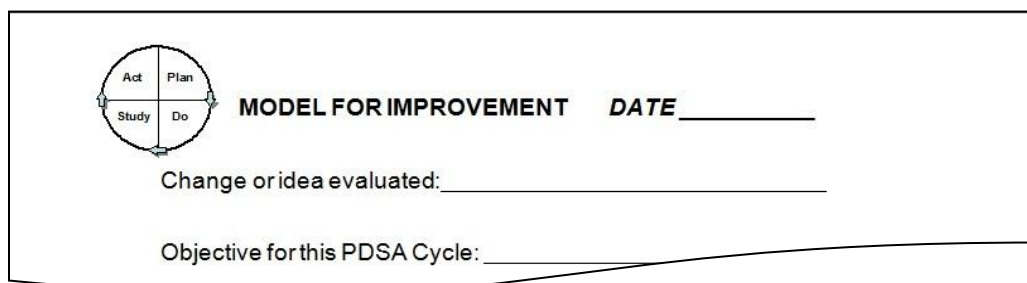
- To increase your belief that the change will result in improvement.
- To decide which of several proposed changes will lead to the desired improvement.
- To evaluate how much improvement can be expected from the change.
- To decide whether the proposed change will work in the actual environment of 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.
- To minimize resistance upon implementation.

How to Test a Change

A first test of change usually happens on a small scale, for example, using Teach Back for patient education during one visit with one nurse or one patient; or for a morning or afternoon

on one day. Use a Plan-Do-Study-Act format and predict what will happen as a result of trying something different. Observe the results, learn from them, and continue to the next test. Use iterative PDSA cycles to test under a variety of conditions. This improves the team's belief that the change will work reliably when implemented.

Figure 15: [PDSA Worksheet](#) (How-to Guide Resources, page 93)



The figure shows a worksheet for the PDSA (Plan-Do-Study-Act) model. On the left is a circular diagram divided into four quadrants labeled 'Act', 'Plan', 'Study', and 'Do', with arrows indicating a clockwise cycle. To the right of the diagram is the text 'MODEL FOR IMPROVEMENT' followed by a line for 'DATE'. Below this, there are two lines for text entry: 'Change or idea evaluated:' and 'Objective for this PDSA Cycle:'.

For example, testing may include adding more staff to try the change, adding a variety of types of patients and families, or testing on different days of the week when the practice or clinic may be busier. The point is to learn as much as possible and create a process that is failure proof that works as reliably as possible. A series of tests 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 leaving the office visit. The nurse learned that materials were confusing to the patient.
- Cycle 2: Nurse adapts the materials to better meet the patient's needs by circling key information. Nurse then uses Teach Back for all HF patients for an afternoon. One patient asks that her daughter be included in the teaching.
- Cycle 3: Nurse expands use of Teach Back to all patients and checks with each patient to find out if he/she wishes to include a family caregiver in the teaching.
- Cycle 4: Nurse starts to train other team members in the method, making time to observe and give feedback to each trainee.
- Cycle 5: Educational module and competency assessment is developed and tested on staff in adjoining clinic.

- Cycle 6: Module becomes part of standard training for new staff members.

Suggestions for Conducting PDSA Cycles

- Remember that one test of change informs and builds upon the next.
- Keep tests small; be specific.
- Refine the next test based on learning from the previous one.
- Expand test conditions to determine whether a change will work under a variety of conditions, such as different times (e.g., day and night shifts, weekends, holidays, times when the unit is adequately staffed, in times of staffing challenges) or different types of patients (e.g., those with lower health literacy, non-English-speaking patients, elderly patients, etc.).
- Collect sufficient data to evaluate whether a test has promise, was successful, or needs adjustment.

Test to Increase Process Reliability

Reliability is failure-free operation over time so that processes produce desired results every time, for every appropriate patient. As PDSA cycles ramp up (i.e., increase in size and scope), make sure to precisely specify the work (who does what, when, how, where, etc.). To make processes more reliable, make use of techniques such as building on existing habits, using checklists to avoid relying on memory, fool-proofing the process so that it is impossible to do it the wrong way, and using standard protocols and training. To increase reliability, for example, consider auto-reminders for Teach Back and documentation. Another tool for developing reliability is to interview staff about how they do particular work, such as Teach Back. If the responses vary, this may reveal a lack of reliability in how the work is done.

Make sure there is a process in place that identifies failures, for example, a patient is ready to leave the office but never received any Teach Back during their visit; or a patient cannot Teach Back important aspects of their self-care and there is no provision for additional home health care support in the care plan. Learn where failures occur and then design redundancies or remedies if they occur.

Teach Back Example: When redesigning your patient education processes in order to better teach patients about after-visit instructions (as described in the model PDSA cycles above), work with staff who conduct the tests to precisely describe the work, including information regarding:

- *Who will do it (be specific – e.g., include the name of the nurse)?*
- *What will they do (e.g., use Ask Me 3 framework to organize teaching for all patients and ask each patient [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 the next office visit, details on the patient's ability to Teach Back the key points are available and teaching is reinforced as needed. [See Section 3D](#), for description of the Ask Me 3 framework.*
- *When they will do it (e.g., during the visit immediately after the patient has seen the physician)?*
- *Where they will do it (e.g., in the exam room)?*
- *How they will do it (e.g., Teach Back documentation tool kept in patient's chart)?*
- *How often they will do it (e.g., at each visit)?*
- *Why they should do it (e.g., to enhance learning and identify patients who are at risk for problems while caring for themselves at home)?*

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. The process works as designed at least 95 percent of the time.

When testing a change, teams will learn from failures as well as from successes.

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.

Here is an example of a team learning from a failed test and applying that learning to improve the process:

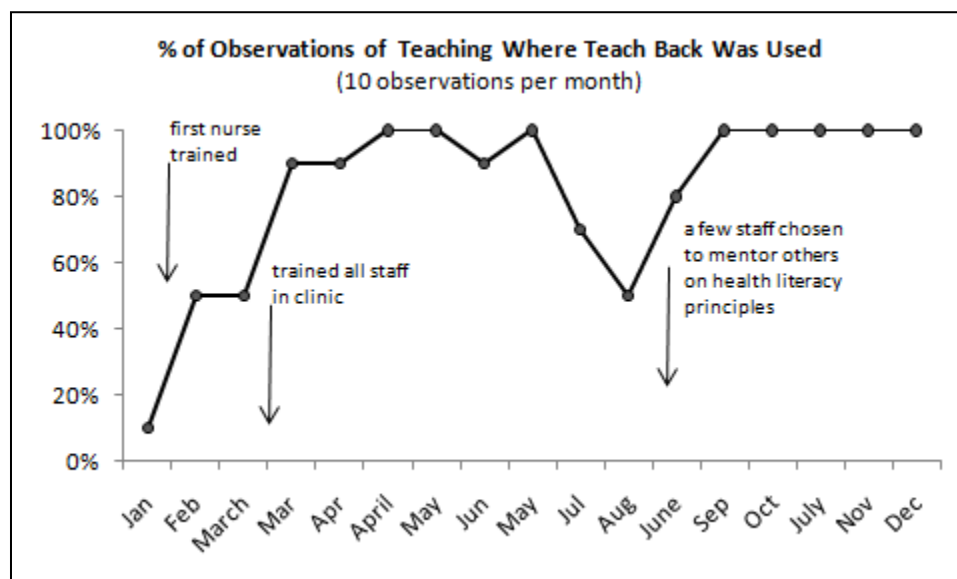
- *The process being tested required a nurse to use the Ask Me 3 framework for all patients. During testing, a nurse assigned to a patient with chronic depression was unsure about the relevant Ask Me 3 questions to assist her with patient education; nurses, physicians, and case manager met to delineate the relevant Ask Me 3 questions for commonly seen mental health conditions and the training was redesigned to cover this information.*

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

Use data, displayed over time, to understand progress.

Use data to assess process reliability. For example, display the following data in a time series graph: The percentage of patients who can Teach Back the medications they should take at home, including dosage and time. Another useful measure is the percentage of observations of teaching opportunities where nurses use Teach Back. Figure 16 shows an example of an annotated time series graph for this measure. The annotations show when specific changes were tested or implemented. Continue to collect and display data such as this to see whether the changes result in improvement. Augment quantitative data with information obtained by asking patients about their experience (consider using the [Diagnostic Worksheet](#), How-to Guide Resources, page 83).

Figure 16: Example Time Series Graph for Process Measure



When data suggest a lack of process reliability, ask the people who do the job what barriers they face. Identify opportunities to execute the new processes more reliably. Avoid blaming staff who do the work. Assume the problem is from poor process design. Work with the team to fix it. For example, if the team observes that nurses are not using Teach Back, the team should ask nurses about barriers to using Teach Back and then improve the likelihood Teach Back will be used. Note, for example, how the data in the graph above (Figure 16) enables the team to see when performance declined and test new interventions to improve reliability. Share data with

unit staff, physicians, and senior leaders. Reflect on lessons learned from both successful and unsuccessful tests of change.

Step 5. Implementation, Scale-up, and Spread

Implementation of Changes

After testing a change on a small scale, learning from each test, and expanding tests to cover a wide range of conditions, the team is ready to implement the change. Implementation occurs when 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. This usually requires revisions to written policies, hiring, training, compensation, electronic work aids in the EMR (if applicable), 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 and scale-up.

Implementation Example: During the testing process, one nurse may initially be trained in the redesigned patient education process using Teach Back. Once the processes and support materials have been adapted so that this nurse is able to use Teach Back effectively over 90 percent of the time, those processes should be implemented by all staff doing patient education within the entire practice or clinic. Making these processes the default system (i.e., the way the work is done rather than the way a few staff do the work from time to time) requires a training system for all current staff in the practice or clinic (including physicians) and changes to orientation programs for new staff; it might require changes to an IT system where information about education is documented and shared. Communication to all staff about the revised expectations for teaching and learning might be developed to start to generate interest in other practices or clinics (i.e., if the practice is part of a larger system) or with other community partners (e.g., home health care, pharmacists, etc.) in preparation for spread.

During implementation, attend to social aspects of the change as well as the technical infrastructure. Leaders need to communicate the *why* as well as 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.³⁶ There may be resistance, or simply confusion. It may take some cycles of testing to put in place an effective infrastructure to

Tips for Sustaining Improvements

- Communicate aims and successful changes that achieved the desired results (e.g., newsletters, storyboards, patient stories, etc.).
- “Hard-wire” 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.

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.

Planning for Scale-up of Changes

For clinics and office practices that are part of a large multispecialty group or large health system with multiple clinic sites, leaders need to plan for the scale-up of changes that have been successfully implemented. Scale-up involves overcoming system and infrastructure issues that arise during implementation that could potentially impede the wider adoption of the changes. For example, after pilot testing Teach Back, a practice identifies this as a successful improvement in patient learning. The leadership of the medical practice then undertakes a deliberate implementation of this change across all practices in the medical group. The infrastructure required to sustain Teach Back in one practice may be different from the infrastructure required for implementation throughout the medical group (e.g., documentation in the electronic medical record or annual competency training). If there are barriers to scale-up, they should be noted and removed if possible.

An important leadership consideration is whether staff have adequate time and resources to adopt the changes. Are the changes developed at the pilot level scalable to the entire organization? For example, using Teach Back for all patients may mean that nurses and other staff will need to redesign visit workflows and responsibilities in order to free up time to reliably implement this new competency.

Spreading Changes

Leaders should plan for spreading the improvement developed in the pilot population or clinic during the early stages of the initiative. After successful implementation of the Key Changes, 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 the new patient populations or organizations.

Successful spread of reliable processes requires that leaders commit sufficient resources to support spread. Staff in the pilot clinic 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.

For small office practices and clinics with fewer than five providers, attention still needs to be paid to the spread of changes from one provider and/or care team to others, but the scope and scale of the effort are of course smaller and less complex. In the case where one provider and his/her care team is the pilot site for the initial testing and implementation of the changes for improving transitions, the leadership of the office practice or clinic can develop a plan that applies the principles discussed here to the specifics of that setting. In a small setting, spread methods such as mentoring, peer-to-peer coaching, and staff meetings for training and support can effectively facilitate the engagement of additional clinicians and staff members in new processes developed by the pilot team.

A key responsibility of leaders, particularly those from larger medical groups, is to develop a plan and timetable for spread and then to measure and monitor progress. Figure 17 shows an example of a tool that leaders can use to monitor the spread of a set of changes (the changes are listed in rows, and the clinics designated for spread are listed in columns). This tool allows a leader to understand the progress of the spread of each change and the spread of changes across the locations designated for spread.

Figure 17: Tool to Monitor Spread

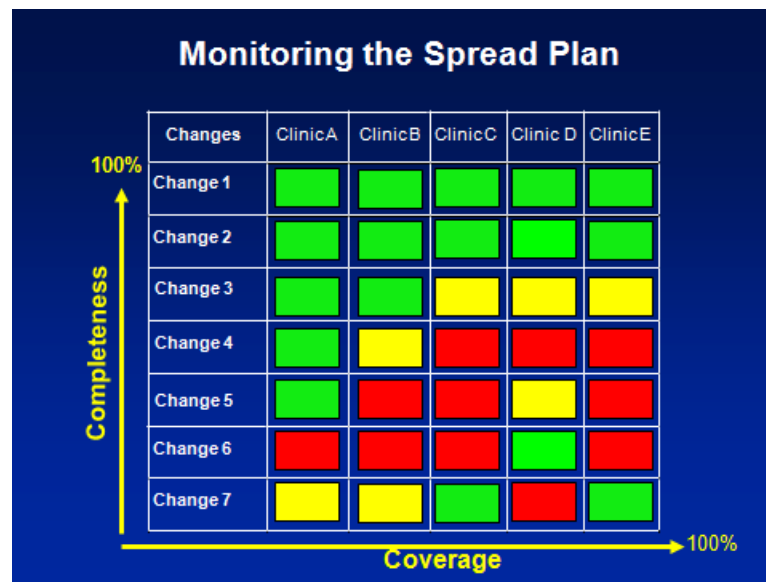
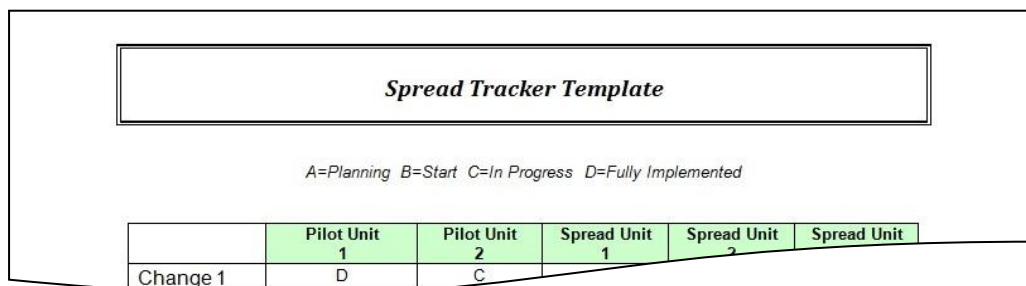


Figure 18: [Spread Tracker Template](#) (How-to Guide Resources, page 96)



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.)

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.ihl.org/offerings/VirtualPrograms/OnDemand/ImprovementModelIntro/Pages/default.aspx.

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

V. System of Measures

Outcome Measures: Readmissions			
Measure	Description	Numerator	Denominator
30-day all-cause readmissions	Percent of patients from a practice who were discharged and then readmitted to a hospital for any cause within 30 days	For a designated measurement month, the number of patients from a practice who were discharged and then readmitted to a hospital within 30 days Exclusion: Planned readmissions (e.g., chemotherapy schedule, rehab, planned surgery)	The number of patients from a practice who were discharged from a hospital during a designated measurement month Exclusions: Labor and delivery, transfers to another acute care hospital, and patients who die before discharge
Readmissions count	For a designated measurement month, the number of patients from a practice who were discharged and then readmitted to a hospital within 30 days (numerator for percent readmissions above)	NA	NA
30-day all-cause readmissions for the selected subpopulation for the clinic office practice	For a designated measurement month, the percent of patients from a practice with heart failure or other chronic condition who were discharged and then readmitted to a hospital for any cause within 30 days of discharge	For a designated measurement month, the number of patients from a practice with heart failure or other chronic condition who were discharged and then readmitted to a hospital for any cause within 30 days of discharge Exclusion: Planned readmissions (e.g., chemotherapy schedule, rehab, planned surgery)	The number of patients from a practice with heart failure or other chronic condition who were discharged from a hospital during a designated measurement month Exclusions: Transfers to another acute care hospital, patients who die before discharge
Patient satisfaction or patient experience of care measure	To be determined by the practice	To be determined by the practice	To be determined by the practice

Key Changes	Process Measures
Deliver Timely Access to Care Following a Hospitalization	• Percent of patients who have a scheduled follow-up appointment at the time of discharge • Percent of patients who are seen in an appropriate time frame following a hospitalization (i.e., 24 to 48 hours for high-risk, 5 days for moderate-risk, and at the provider's discretion for low-risk patients) • Percent of eligible patients (i.e., Medicare fee-for-service patients within 30-day post-hospital discharge period) for whom the practice billed for compensation under the CMS transitional care management (TCM) benefit (discussed above on page 4.)
Prior to the Visit: Prepare Patient and Clinical Team	• Percent of first post-hospital visits when the physician had the discharge summary available at the time of the visit • Percent of patients who received a reminder call prior to their first post-hospital office visit
During the Visit: Assess Patient and Initiate New Care Plan	• Percent of patients who can Teach Back the medications they should take at home, including dosage and time • Percent of patients who can Teach Back the warning signs they should watch for and how to respond
At the Conclusion of the Visit: Communicate and Coordinate Ongoing Care Plan	• Percent of patients who leave the first post-hospital visit with a printed and reconciled medication list • Percent of patients who leave the first post-hospital visit with a printed care plan

VI. Case Studies

Everett Clinic and Providence Hospice and Home Health Care	p. 60
Cambridge Health Alliance	p. 64
Allina Health	p. 70
Holyoke Medical Center	p. 74

Everett Clinic and Providence Hospice and Home Care of Snohomish County, WA¹

Locating a Palliative Care Nurse in a Primary Care Practice

Aim

To prevent unnecessary hospital admissions and ED visits, ensure appropriate follow-up care in the physician's office, and coordinate community and end-of-life services while improving the quality and cost-effectiveness of care for those patients identified as needing supportive services.

Methodology

The Everett Clinic partnered with Providence Hospice and Home Care of Snohomish County in Washington State to place a palliative care nurse in a primary care clinic.² The original test began in August 2004 in one clinic and included 140 patients over age 65 who passed away between August 2004 and January 2006. The two organizations have continued to develop and expand the program, which, as of June 2011, encompasses six clinics, including a Cancer Center Partnership, with a total of 60 physicians and 910 patients.

Results

The original program reduced utilization of expensive acute care by substituting high-quality home health care for patients who volunteered to participate in this no-cost program. Specific outcomes included:

- *Fewer hospitalizations:* 53 percent of the original cohort of patients who received palliative care had not been admitted to the hospital 60 days prior to death, compared to just 28 percent of patients who did not receive palliative care. In addition, for those patients who were admitted to the hospital, those receiving palliative care had an average of 1.9 admissions, compared to 2.4 admissions for patients not receiving palliative care.
- *Increased use of high-quality end-of-life services:* The program increased the use of hospice services, with a median hospice length of stay of 47 days for patients in the

¹ More information about this case study is available on the AHRQ Health Care Innovations Exchange at www.innovations.ahrq.gov/content.aspx?id=1738.

² This program is modeled on the one developed in the early 1990s by the Franciscan Health System in Tacoma, WA, called "Improving Care through the End of Life."

program, compared to 6 days for patients not receiving palliative care services. The total length of stay for hospice services also increased. In addition, in 2007, of the 129 referrals to hospice agencies, program coordinators estimated (based on pre-program data) that approximately 50 percent of the hospice referrals would not have been made without the program.

- *Cost-effectiveness:* While no hard data are available, program leaders concluded that the program was cost-effective by reducing the use of inpatient and ED care.
- *High staff satisfaction:* Annual staff satisfaction surveys completed at two of the three clinic locations have received ratings of “4” out of “5” for RN respondents and “5” out of “5” for MD respondents.
- *Patient satisfaction:* In a 2008 survey that was given to patients at three of the participating sites, a total of 197 patients (with a 70 percent response rate) rated their satisfaction with the program as a 4.8 (on a scale of 1 to 5, with 5 being highest possible score).

Changes Tested and Implemented

A palliative care nurse is physically located in a primary care clinic. This is a key design feature of the program. The nurse develops a relationship with the physician and clinic staff and facilitates timely care and service referrals for patients in need, thereby preventing a cycle of rehospitalizations when hospice or home health care would be more appropriate. The program includes the following components:

1. Identification of Patients and Initial Enrollment

During office visits, physicians invite the nurse to speak with potential candidates and their family members/caregivers about the program. The conversation with the patient and family is sometimes held over the phone. Potential candidates include those patients who may not yet qualify for hospice care, but who could benefit from palliative care. The typical referral is an individual aged 75 or older who has multiple comorbidities such as coronary artery disease, congestive heart failure, and dementia. Referrals may come from physicians or other caregivers in both the office setting and the hospital. In the hospital setting, a transition coach or case manager may refer inpatients who are deemed vulnerable (e.g., those who have had multiple hospital stays).

Typically, palliative care staff are located in the office in close proximity to physician and office staff. Phone calls are prescreened so that calls from patients in the palliative care program go directly to palliative care staff. Either a hospice-trained nurse or support staff for the palliative care program is reliably available. Office staff also utilize palliative care program staff for consultation around non-palliative care questions. A typical office has one palliative care nurse/staff, seven to nine physicians, four RNs, four medical assistants, and one to two phone receptionists. The staff members use lean tools such as electronic communication/drug refills through electronic health records. The work is integrated into the primary care office so that patients do not perceive any difference between clinic RNs and palliative care RN care managers.

Following a referral, the palliative care nurse explains the program and enrolls interested patients. Patients receive information about the Lifeline program and complete the Physician's Order for Life-Sustaining Treatment (POLST) form that designates desired care at the end of life.

2. Ongoing Care Management

The palliative care nurse provides the patient with the following services (as needed): patient and family counseling on current care needs and end-of-life issues; periodic telephone assessments of medical issues; home visits to assess the patient directly; and coordination of community and social services, including palliative care services. When the nurse sees a patient who may be a good candidate for hospice or home health care, the nurse contacts his or her family, coordinates the referral, and becomes the contact person for the agency.

3. Integrated Care

The palliative care nurse is a full member of the patient's care team and, as such, makes recommendations to the physician about necessary treatments or services, responds to the patient's requests for an appointment or medication refill, and participates in the patient's office visits. The palliative care nurse also attends regular staff meetings to discuss the program, solicit feedback, and address concerns. In managing patients, the palliative care nurse has access to the clinic's electronic medical record (EMR) and is able to assess patient health records, book appointments with clinic physicians, and send electronic notifications about patient care plans to clinic physicians and nurses.

4. Proactive Outreach

The palliative care nurse calls each patient once a month to check on his or her health status and needs.

5. Support for the Palliative Care Nurse

A part-time program assistant aids each nurse by entering patient data, assisting with proactive patient phone calls, and directing incoming calls to the palliative care nurse.

Considerations for adoption and/or adaptation of this change for your practice:

1. Obtain senior administrative buy-in to ensure both administrative and clinical leadership support for the program. A designated leader communicates the importance of the program to the clinical and support staff, authorizes the use of clinical space and staff to support the program, addresses any issues that arise during early testing of the program, and then makes any changes necessary to embed the program in the practice during implementation.
2. Select an initial test site. Consider a primary care site with a high percentage of Medicare patients.
3. Identify a physician champion. An ideal candidate is one who is willing to try the new program and has a large panel of elderly patients.
4. Find a designated space for the palliative care nurse (although initial testing can be done with minimal disruption to the clinic organization).

Cambridge Health Alliance, Cambridge, MA⁴⁷

Improving Transitions in Primary Care:

Primary Care Outreach and Primary Care-Based Care Management

Part 1: Primary Care Outreach

Aim

Cambridge Health Alliance redesigned its hospital discharge process to promote seamless inpatient-to-outpatient transfer. The new system features a coordinated effort between hospitals and primary care practices. It was designed to better equip patients and families for self-care and to handle the unexpected once they leave the hospital, to improve the quality of communication among all parties, and to establish clear accountability for patient care at all times.

Methodology

The initial design was tested with 100 patients from two Cambridge Health Alliance (CHA) primary care clinics who were admitted to Somerville Hospital, in Somerville, MA, between June 2006 and January 2007. Based on positive results from the pilot study, inpatient and outpatient care teams across the CHA system spread the changes so that it is now a standard discharge transfer process as patients' transition from the hospital to their primary care providers.

Results

Intervention patients in the pilot study were less likely than those in the control group (25.5 percent versus 55.1 percent) to have one of four undesirable outcomes (i.e., no follow-up appointment with their primary care provider within 21 days, hospital readmission within 31 days, ED visit within 31 days, and failure to complete a recommended outpatient work-up following discharge). Following system-wide implementation, CHA has seen a greater than 25 percent reduction in readmissions and improved outpatient follow-up. An increased rate of outpatient workups was shown in the pilot study but has not yet been calculated for the full implementation phase. In addition, nursing outreach resulted in remedial actions (correcting misunderstandings about medication use, calling in needed prescriptions, arranging transportation to ensure arrival at outpatient appointment, etc.) in more than 50 percent of contacted patients. This figure reflects the success of the intervention in reducing the risk of small problems that can lead to more serious issues necessitating readmission.

Changes Tested and Implemented

Cambridge Health Alliance's discharge transfer system has five steps:

Step 1: Creation of Home Care Plan

The Home Care Plan (Figure 19) provides patients and families with essential information, including a brief summary of what occurred while they were in the hospital (e.g., what they were treated for, procedures, etc.); a list of their medications, highlighting new medications and any medication changes made since their admission; any recommended tests or pending results from tests they had in the hospital; and a list of follow-up appointments. The hospital physician, nurse, case manager, social worker, and physical therapist can all input information that becomes part of the patient-friendly Home Care Plan.

Figure 19: Cambridge Health Alliance Home Care Plan

Cambridge Health Alliance Home Care Plan
1. Patient demographics
2. Discharge diagnosis
3. Names of hospital physicians (including residents and attending)
4. Recommended outpatient workup(s)
5. Pending medical test results
6. Vaccinations given
7. New allergies
8. Discharge medications list, including continued medications (with dose changes high-lighted, new medications, and stopped medications)
9. Dietary and activity instructions
10. Home services ordered
11. Scheduled appointments with primary care provider, specialists, and for diagnostic studies
12. Optional nursing comments
13. Reminder to patients to bring the form to their next primary care appointment

Step 2: Patient Review of Home Care Plan

A hospital nurse carefully reviews the Home Care Plan with the patient prior to discharge. Patients receive hard copies of their plans to take with them when they leave the hospital. The Home Care Plan also include guidance for the patients and/or families about how to handle

routine and unexpected problems that might arise at home (e.g., whom to call with a question, when to call the doctor, etc.). In addition, the hospital nurse may also include any concerns about the patient, such as home safety, patterns of medication use, or cognitive problems.

Step 3: Electronic Transmission of Home Care Plan

The plan is electronically transmitted to the patient's primary care site and becomes part of the patient's permanent medical record. Receipt of the Home Care Plan at the primary care office signals to the primary care nurse that the patient has been discharged and that a primary care nurse should telephone the patient by the next business day.

Step 4: Telephone Outreach

The primary care nurse contacts the patient the next business day following discharge. The nurse reviews the Home Care Plan with the patient and/or family member, identifying and solving any problems that may have arisen since discharge (e.g., prescriptions not filled, urgent appointments needed, etc.) and confirms the follow-up visit that was scheduled prior to discharge. This contact helps to resolve issues for the patient and clearly establishes that the primary care site is now accountable for patient care.

Step 5: Primary Care Provider (PCP) Reviews Home Care Plan and Nursing Outreach Notes

The PCP reviews the Home Care Plan immediately following the nurse outreach call, making any needed modifications.

Considerations for adoption and/or adaptation of this change for your practice:

1. Work to formalize the roles of the transferring and accepting parties. The hospital team must develop a standardized means of communicating information to patients and their primary care providers. In the primary care office, staff and clinicians need to develop a clear process to receive and act upon their receipt of the Home Care Plan from the hospital.
2. Utilize the clinical nurses at the primary care sites, whom the patients know well, for the outreach to patients. This strengthens the interaction during the follow-up phone call and may result in a more productive exchange of information.
3. Incorporate redundancy into the process to ensure a reliable design (e.g., both the inpatient nurse and the outpatient nurse review the Home Care Plan with the patient).

4. Costs associated with this process can be kept low since no additional personnel are required and the roles of existing personnel are expanded only slightly.

As a way to enhance the outreach process described above, CHA is also piloting the use of Community Health Workers to work with high-risk patients. The program involves an initial hospital contact followed by weekly telephone outreach calls. While the formal results of program are not yet available, initial data showing decreased readmissions are encouraging.

Part 2: Primary Care-Based Care Management

Aim

In addition to redesigning outreach to recently discharged patients, CHA realized that it needed an overall approach to caring for primary care patients that would recognize and meet patients with different levels of care needs. In 2009, CHA began the process of transforming their primary care clinics to patient-centered medical homes (PCMH). This represented a major shift in how they designed proactive care for patients at high risk for poor health outcomes. For CHA, the PCMH focuses on helping safety net patients — who often feel disconnected and experience fragmented care — to feel connected to an empowered primary care team. The role of complex care management is to reinforce this longitudinal relationship with the patient's care team while providing focused support during high-risk moments in a patient's life — for example, a hospitalization, an episode of homelessness, or relapse into substance abuse. They envision care management as a team effort among a nurse care manager, a community health worker, and a social worker that addresses the whole person, whether the primary cause of high-risk status is medical, social, or behavioral health-related.

Methodology

By analyzing data on how their patients interacted with their health system, they determined that their high-risk patients needed a care management team that has the capacity to meet the medical, social, and behavioral health needs of complex patients. This team includes the capacity to provide care coordination of basic social issues through a community health worker, including effective engagement, food, housing, transportation, financial counseling, and assistance with insurance. A nurse care manager provides care management of complex medical conditions, including medication management at discharge and chronic disease management for the top five percent of patients with poorly controlled chronic disease. Finally, a social worker provides effective care management of behavioral health conditions. The

community health worker, nurse care manager, and social worker comprise the Complex Care Management (CCM) team to address the needs of approximately 5,000 patients, with an average active caseload of 300 patients who are dynamically identified to be in the top five percent of high-risk patients at high-risk moments of their lives.

Changes Tested and Implemented

The risk assessment by primary care — to identify those patients appropriate for the CCM team — is done as part of the outreach process described above. Every discharged patient receives an initial outreach call by a primary care nurse within 24 to 48 hours. During the call, the primary care nurse determines the level of risk, either low or high. Low-risk patients who may need education, medication management, and/or a psych referral are referred to appropriate services during the call. High-risk patients are those who, in addition to having been hospitalized or seen in the emergency room, may also have poorly controlled high-risk medical or psychiatric chronic disease, such as diabetes, asthma, CHF, or depression; those identified by payers as high-risk; and/or those who have an acute change in their medical, social, or behavioral health condition. These patients are given a primary care appointment within seven days and are also referred to the Complex Care Management (CCM) team.

The CCM team follows up with the patient to begin an assessment for a care plan that includes a VNA or CCM team home visit; a meeting with the CCM team member prior to or during the primary care office visit; a psych referral if needed; an outreach call following the primary care visit; and subsequent calls, visits, or check-ins as needed. High-risk patients may also be identified by the primary care team during their interaction with patients at the time of an office visit. The daily workflow for the CCM team includes huddles with the usual care team in the clinic, and daily and weekly meetings to discuss the needs of high-risk patients. The main complex care manager for each patient is the person who can be most helpful given the active issue the patient is facing (medical, social, or behavioral health) and with whom the patient has the closest relationship. The goal is to understand and support the whole person — whether the need is assistance with groceries, medication management, coordination of medical appointments, or support to make it to a suboxone group to combat addiction.

Results

While it is too early to tell the impact of the CCM team approach, the following early results are promising: 13 percent reduction in A1c for patients with diabetes; reduction in ED readmission

rates YTD by 5.5 percent (380 visits); and reduction in hospital readmission rates over time from approximately 20 percent to 15 percent since the initiation of nurse follow-up calls.

Allina Health, Minneapolis, MN

Communicating Across Care Settings: Recommendations for the Outpatient Provider (ROP)

Aim

Allina Hospitals and Clinics have been working on care for patients in their ambulatory clinics as part of a system-wide transformation that focuses on values and leadership development.³ They have been able to spread innovations including the following: the implementation of an EMR throughout all clinic sites and system hospitals; the redesign of core care processes, which has produced chronic care measures that are among the highest in the state; the development of team-based care at all levels of the organization; and the alignment of goals through a shared strategic vision.

Their aim for patients is to reduce unnecessary readmissions by improving transitions in care between the hospital and outpatient clinics and other community providers; providing care management support for high-risk patients; and building the abilities of patients and/or families to self-manage their illness. As part of the statewide initiative, Minnesota RARE Campaign (reducing avoidable readmissions effectively),⁴ Allina Health's aim is to reduce potentially preventable readmissions (PPRs) from an A/E (actual/expected) ratio of 1.0 to 0.89 (with 2009 as the baseline year) by the end of 2013. Allina Health's work to reduce readmissions began with heart failure patients in 2007, was broadened to include AMI and Pneumonia discharges in 2010, and then was expanded to all cause discharges in 2012.

Methodology

Key components of Allina Health's improvements in care transitions that link the hospitals with the outpatient providers include the following:

Follow-up Appointment within Five Days

The appointment for the follow-up visit is made before the patient leaves the hospital. Allina was able to improve its rate of follow-up appointments completed within five days from 28% to ~45%

³ Allina Hospitals and Clinics was the 2009 recipient of the AMGA Acclaim Award. See link for the announcement of the award. Available at www.newswise.com/articles/view/556020.

⁴ <http://www.rarereadmissions.org/>

(goal is 60%) by making important changes to their discharge process. Instead of asking the patient to make an appointment within five days, or asking the unit clerk to make an appointment before discharge when the order is written, the discharge order now routes electronically to the Allina Call Center. The call center staff member then calls the patient in his or her room hospital room to make the follow-up appointment. The discharging clinician remains free to choose what they believe is the appropriate follow-up interval, although the follow-up within five day order is defaulted in most ordersets,

Clinics must manage their schedules so that an appointment slot within five days is available to meet the appointment request. The intent is to schedule the visit with the patient's primary clinician rather than with any available clinician, since this is the clinician who knows the patient best and with whom the patient is most comfortable. Best of practice is holding one to two appointments per clinician for hospital follow-up which are automatically released if not used.

Recommendations for the Outpatient Provider (ROP)

In order to create consistent and reliable communication between Allina Health's inpatient and outpatient providers at the time of discharge so that the care plan started in hospital is continued in the post hospital setting, Allina developed the "Recommendations for the Outpatient Provider" (ROP.) The ROP is a template within the EMR discharge ordersets, which facilitate the communication of structured handoff information to the outpatient clinician. This information is in a standard location in the discharge summary that has been determined to be the most helpful to outpatient (OP) clinicians, and it also appears in the patient's After-Visit Summary (AVS). Currently, about 5,500 discharge documents each month include an ROP (55% of discharges). The ROP includes the following elements:

- Specific recommendations to be addressed at the follow up visit;
- Reason(s) medications were stopped or changed;
- Anticoagulation/Oxygen Recommendations;
- Tests and Studies needed; and
- Weights.

Provide Self-Management Support by Use of an After-Visit Summary (AVS)

Allina outpatient clinicians are intent on providing written information to patients (after-visit summaries) at the end of clinic visits in the following agreed-on format:

- What you should do;
- How you will know the plan is not working;
- Who you should call if the plan is not working; and
- When you should be seen next.

All patients who are seen for a post-hospital visit are expected to receive an AVS with instructions on what to do next.

Patient self-management is also supported using enhanced teaching methods such as Teach Back, Ask Me 3, and the Hospital to Home (H2H) questions in conjunction with self-management tools (i.e., the Red-Yellow-Green Heart Failure symptom tool, [page 90](#) in this guide) to help the patient identify warning signs for changes in their clinical condition requiring attention by the doctor. Enhanced teaching methods also identify patients who may need additional support and/or services. Additional resources are arranged as needed by clinic staff.

Other important components of Allina Health's overall care transitions program include transition conferences of high-risk patients, the Care Transitions Intervention (CTI) coaching program (piloted at one hospital), and providing accurate and complete information to the SNF/TCU (Transitional Care Unit) at time of hospital transition. SNF transitions continue to be an area to improve handoffs, with work currently underway through Minnesota's QIO, StratisHealth.

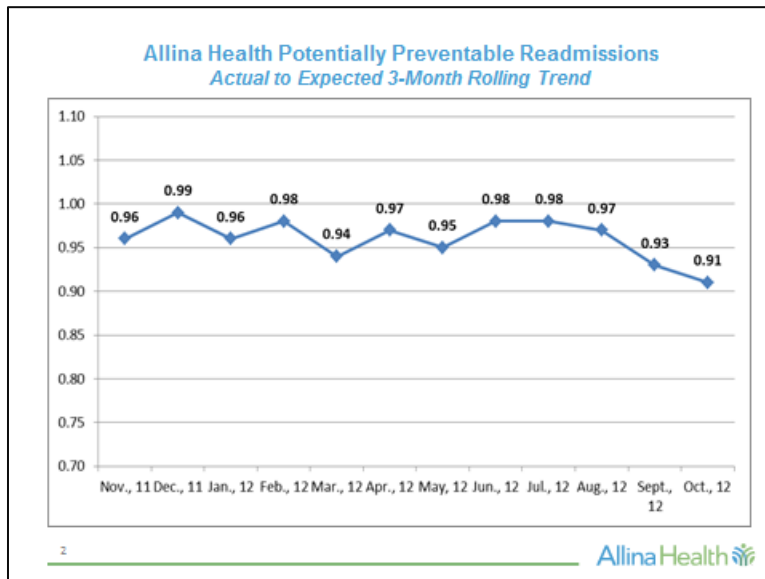
Results

Data from the RARE campaign allows Allina Health to track its progress (Figure 20 below) in reducing Potentially Preventable Readmissions (PPRs.) Potentially Preventable Readmissions are expressed as the ratio between actual to expected readmissions.⁵ Allina Health uses additional measures to track its progress including reductions in all-cause readmissions. From

⁵ Identifying Potentially Preventable Complications Using a Present on Admission Indicator - Article by John S. Hughes, M.D., Richard F. Averill, M.S., Norbert I. Goldfield, M.D., James C. Gay, M.D., John Muldoon, M.H.A., Elizabeth McCullough, M.S., and Jean Xiang M.S., published in *Health Care Financing Review/Spring 2006*.

the 2009 baseline to the end of 2012, Allina Health has achieved a 7 percent reduction in all-cause potentially preventable readmissions (PPRs).

Figure 20: Allina Health Potentially Preventable Readmissions (November 2011 – October 2012)



Holyoke Medical Center Cross-Continuum Team, Holyoke, MA

Building Partnerships with Primary Care

Holyoke Medical Center (HMC) began its efforts to reduce avoidable readmissions in September 2011. HMC leads a cross-continuum team involving key partnerships with the Holyoke Community Health Center, 13 local area skilled nursing facilities, seven home health agencies, area agencies on aging, two representatives from the hospital Patient and Family Advisory Committee, and a corporation that manages public senior housing in four communities that accesses HMC and its providers, among other partners in the community. HMC's work to reduce avoidable readmissions focuses on patients with congestive heart failure (CHF) or chronic obstructive pulmonary disease (COPD), and who are at high risk for readmission. In addition, HMC is applying similar strategies for reducing readmissions to patients who are seen in the emergency department.

HMC, a 198-bed community hospital, is the largest provider of inpatient and outpatient health care services in the poorest community in Massachusetts. HMC serves a population that is largely Hispanic (57.7 percent), with greater than 50 percent of patients over the age of 18 being below 100 percent of the federal poverty level. Over 40 percent of patients under the age of 18 are below 100 percent of the federal poverty level. Thirty percent of patients over the age of 25 in this community did not graduate from high school. Cardiovascular deaths are 120 percent above the state average.

HMC has been particularly successful in creating strong linkages with other care setting providers, including two high-referring primary care practices: Holyoke Health Center and Western MA Physicians Group. The HMC care transitions lead and the office managers worked together to acknowledge and address their common needs and to codesign a number of key processes, including:

- Hospital staff notify the practice when their patients are admitted, which assists them in managing the care of their patients as they move towards a patient-centered medical home model;
- The practices provide follow-up appointments for CHF patients within three days after the hospital case manager notifies them of a pending discharge by utilizing their “same-

day” unit (i.e., dedicated appointment that enables the practice to respond to same-day demand);

- The hospital and the practices use the same patient education methods and materials (e.g., heart zone tool for CHF patients, etc.) so that the patient receives consistent information and guidance; and
- The practice obtains the discharge summary and medication list electronically from the hospital so as to be prepared for the patient visit.

In addition, the Home Health Agency Transition Coach sees high-risk CHF patients following discharge for one or two visits and keeps the primary care practice informed of the patients’ conditions through electronic progress notes and phone calls as needed.

In addition to the enhanced coordination with office practices, HMC has built partnerships with other cross-continuum care partners, including nursing homes and home health care agencies to codesign reliable improvements in each of the four STAAR key changes: 1) enhanced assessment for post-hospital needs, 2) effective teaching and enhanced learning, 3) post-hospital care follow-up, and 4) real-time handover communications. These additional changes are reflected in the graphs below that track improvement in their 30-day all-cause readmission rates from January 2011 through April 2013. Over that time HMC has reduced readmissions, reduced variation in the readmission rate, and experienced a slight reduction in overall admissions. In addition, they have held their gains for over a year.

Results

Figure 21: Holyoke Medical Center Raw Readmissions and Discharges

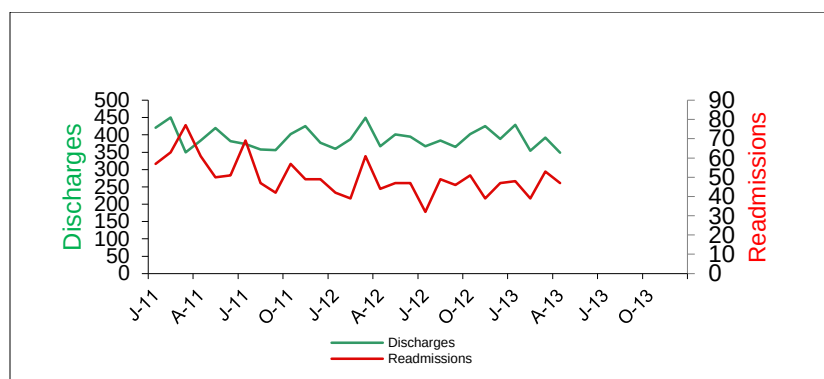
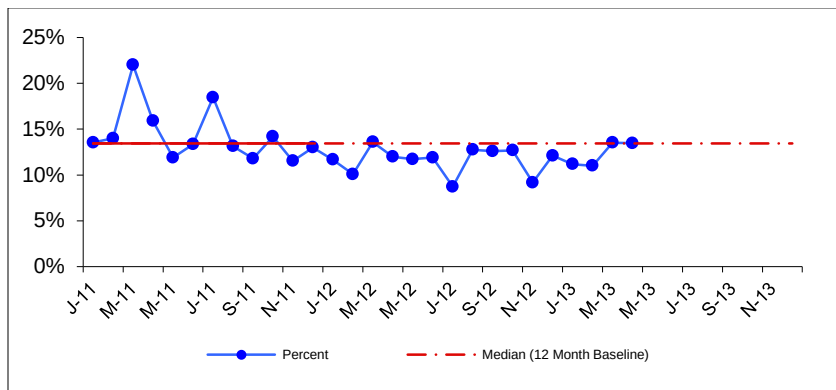


Figure 22: Holyoke Medical Center Percent 30-Day All-Cause Readmissions



VII. How-to Guide Resources

Return to:

List of Typical Failures	p. 78	
Diagnostic Worksheet	p. 83	p. 41 , 51
A Physician's Checklist for Post-Hospital Follow-Up Visits	p. 84	p. 8
Observation Guide for First Post-Hospital Visits	p. 85	p. 79 , 80 , 81 , 82
Key Educational Topics for High-Volume Clinical Conditions	p. 87	p. 25
Heart Failure Magnet	p. 89	p. 26
Heart Failure Zones	p. 90	p. 26 , 72
Observation Guide for Patient Teaching	p. 91	
PDSA Worksheet	p. 93	p. 48
Example PDSA Worksheet	p. 94	
Spread Tracker	p. 96	p. 55
PCMH and STAAR Cross-Walk	p. 97	p. 3
Readiness Assessment	p. 98	p. 33

Summary of Typical Failures Observed in the Transition from Hospital to Office Practice

1. Provide Timely Access to Care Following a Hospitalization

Recommended Changes:

1A. Review on a daily basis information received from the hospital about admissions and anticipated discharges.

1B. Provide the appropriate level and type of follow-up for high-risk, moderate-risk, and low-risk discharged patients.

To provide timely access to care following a hospitalization, providers in an office practice must be able to anticipate the needs of their hospitalized patients and have capacity in their clinic schedules for the appropriate level of contact.

Typical failures associated with attempts to provide patients with timely access to care following a hospitalization include the following:

- Primary or specialty care physician does not know his or her patient has been admitted or discharged because of the lack of an alert system from hospital to office;
- Hospital physicians cannot easily reach the office practice physicians because the outpatient physicians are busy with patients in the office or have difficulties with phone access and leaving messages;
- Lack of person-to-person contact between hospital and office practice staff is caused by an absence of identified individuals to coordinate communication on each end;
- Patient is told to schedule an appointment with his or her primary or specialty care provider, but is confused about whom he or she should see, by when, and why;
- Knowledge gap for those patients whose condition rapidly deteriorates with respect to whom to contact for help (i.e., the hospital from which they were just discharged, or the primary or specialty care provider with whom they have an appointment within the next few days);

- Lack of agreement and clarity about whether hospital or office practice staff are responsible for providing post-discharge phone contact and scheduling home health care services;
- Lack of open appointments in the office practice schedule that would allow for post-discharge visits within 48 hours;
- Information from the primary care physician (i.e., feed forward) about a newly admitted patient is often unavailable to the hospital staff doing the initial admission assessment and medication reconciliation; and
- Patient discharge information is not standardized with respect to data elements, format, and mode of transmission; each physician in a hospital may provide different information about the patient at discharge.

What are your typical failures and opportunities for improvement?

- Review the findings from Section IV, [Step 3 in Identifying Opportunities for Improvement](#), page 41. Periodically repeat Step 3 to continuously learn about opportunities for improvement. Use the Observation Guide: Observing Current Processes for the First Post-Hospital Visit (Figure 23).

Figure 23: [Observation Guide: Observing Current Processes for the First Post-Hospital Visit](#) (How-to Guide Resources, page 85)

Observation Guide: Observing Current Processes for the First Post-Hospital Visit

Observe what happens for patients and for office practice providers and staff prior to – and on the day of – the first post-hospital visit. Reflect upon what you observed to discover what went well and where there are opportunities for improvement.

What do you predict you will observe?

- Tip: We recommend that you complete the entire Observation Guide exercise as you begin your work to identify opportunities for improvement in your practice. You can then focus on what you've learned about each part of the first post-hospital visit as you progress through this section of the How-to Guide.

- Observe your current process for the first post-hospital visit. What did you learn about the first set of recommended changes (i.e., how does your practice provide timely access to care following a hospitalization)?

2. Prior to the Visit: Prepare Patient and Clinical Team

Typical failures that occur prior to the first post-discharge office visit include the following:

- Primary or specialty care physician does not have the patient record, discharge summary, or medication list at hand for follow-up visit;
- Outpatient physician may have trouble reaching the hospital-based physician in order to clarify information about the patient's condition, outstanding tests, and/or treatment plan;
- Office practice team may not be aware of barriers for the patient keeping their appointment (e.g., transportation, reliance on family members, etc.);
- Outpatient physician does not always coordinate care with case managers or other community-based providers such as home health care nurses;
- Patients do not know whom or when to call if their condition worsens;
- Patients may not fully understand the importance of the first post-hospital visit; and
- Patients have only a partial understanding of what they need to do and why, despite the use of methods to engage them during their hospital stays in learning about their care.

What are your typical failures and opportunities for improvement?

- Review the findings from Section IV, [Step 3 in Identifying Opportunities for Improvement](#), page 41. Periodically repeat Step 3 to continuously learn about opportunities for improvement. Use the [Observation Guide: Observing Current Processes for the First Post-Hospital Visit](#) (How-to Guide Resources, page 85).
- Tip: Use your findings from the first section of the Observation Guide, which focuses on what happens prior to the office visit. What did you learn?

3. During the Visit: Assess Patient and Initiate New Care Plan or Revise Existing Plan

Typical failures that occur at the time of the first post-hospital office visit include the following:

- Primary or specialty care physician does not have the patient record, discharge summary, or medication list at hand for follow-up visit;
- Medications are not reconciled during the first post-discharge office visit;
- Patients are not involved in decisions about their treatment plan and medications;
- Patients are not provided with a comprehensive care plan that they understand and are confident they can follow;
- Patients don't know whom and when to call if their condition worsens in the time after their appointment;
- Lack of standardization between the hospital and office practice in information provided and in teaching methods;
- Patient education focuses only on medications and excludes other concerns of the patient such as when and how to start exercising and making adjustments in diet;
- Patients have only a partial understanding of what they need to do and why, despite the use of methods to engage patients in learning about their care; and
- Failure of the office practice care team to recognize and provide support for patients with a low capacity for self-care due to low health literacy, financial barriers, other social problems, alternative health beliefs, substance abuse, or mental illness.

What are your typical failures and opportunities for improvement?

- Review the findings from Section IV, [Step 3 in Identifying Opportunities for Improvement](#), page 41. Periodically repeat Step 3 to continually learn about opportunities for improvement. Use the [Observation Guide: Observing Current Processes for the First Post-Hospital Visit](#) (How-to Guide Resources, page 85).
- Tip: Use your findings from the second section of the Observation Guide, which focuses on what happens during the first post-hospital visit. What did you learn?

4. At the Conclusion of the Visit: Communicate and Coordinate the Ongoing Care Plan

Typical failures associated with communicating and coordinating the ongoing care plan with patients and across outpatient providers and settings include the following:

- Patients leave the office visit with questions about what they should do when they get home (e.g., medications, eating plan, etc.);
- Primary care physicians who lack the time or confidence to sufficiently manage the care of patients with complex medical conditions after discharge (e.g., adjusting medications for patients after a specialist visit or consultation or following a hospitalization);
- Lack of agreement between specialists and primary care physicians about which physicians are responsible for managing the patient's condition in the short or long term;
- Lack of communication to providers when their patients with multiple conditions are discharged from the hospital;
- Poly-pharmacy issues due to prescriptions by multiple providers and a lack of oversight of the patient's overall medication regimen or treatment plan; and
- Home health care agencies, skilled nursing facilities and other supportive services are not provided with an updated care plan for their past/current patients.

What are your typical failures and opportunities for improvement?

- Review the findings from Section IV, [Step 3 in Identifying Opportunities for Improvement](#), page 41. Periodically repeat Step 3 to continually learn about opportunities for improvement. Use the [Observation Guide: Observing Current Processes for the First Post-Hospital Visit](#) (How-to Guide Resources, page 85).
- Tip: Use your findings from the third section of the Observation Guide, which focuses on what happens at the conclusion of the visit. What did you learn?

Diagnostic Worksheet: Interviews with Patients, Family Members, and Care Team Members about a Recent Rehospitalization

Ask Patient and/or Family Members:

How do you think you became sick enough to be readmitted to the hospital?

Did you have a physician office visit before returning to the hospital?

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

Describe any difficulties you encountered in scheduling or getting to that office visit.

Has anything (e.g., appointments) gotten in the way of your taking your medicines?

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

Describe your typical meals since you got home.

Interview physicians, nurses, or others who know the patient. Include clinicians and staff from the hospital, skilled nursing facility, and/or home health care as appropriate.

Ask care team members:

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

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.

Checklist for Post-Hospital Follow-Up Visits

Prior to the Visit

- ☐ Review discharge summary.
- ☐ Clarify outstanding questions with sending physician.
- ☐ Reminder call to patient or family caregiver to:
 - ☐ Stress importance of the visit and address any barriers.
 - ☐ Remind to bring medication lists and all prescribed and over-the-counter preparations.
 - ☐ Provide instructions for seeking emergency and non-emergency after-hours care.
- ☐ Coordinate care with home health care nurses and case managers if appropriate.

During the Visit

- ☐ Ask the patient to explain:
 - ☐ His/her goals for visit.
 - ☐ What factors contributed to hospital admission or ED visit.
 - ☐ What medications he/she is taking and on what schedule.
- ☐ Perform medication reconciliation with attention to the pre-hospital regimen.

- ☐ Determine the need to:
 - ☐ Adjust medications or dosages;
 - ☐ Follow up on test results;
 - ☐ Do monitoring or testing;
 - ☐ Discuss advance directives;
 - ☐ Discuss specific future treatments (POLST).
- ☐ Instruct patient in self-management; have patient repeat back.
- ☐ Explain warning signs and how to respond; have patient repeat back.
- ☐ Provide instructions for seeking emergency and non-emergency after-hours care.

At the Conclusion of the Visit

- ☐ Print reconciled, dated, medication list and provide a copy to the patient, family caregiver, home health care nurse, and case manager (if appropriate).
- ☐ Communicate revisions to the care plan to family caregivers, health care nurses, and case managers (if appropriate). Consider skilled home health care or other supportive services.
- ☐ Ensure that the next appointment is made, as appropriate.

Observation Guide: Observing Current Processes for the First Post-Hospital Visit

Observe what happens for patients and for office practice providers and staff prior to – and on the day of – the first post-hospital visit. Reflect upon what you observed to discover what went well and where there are opportunities for improvement.

What do you predict you will observe?

Did the care team member(s)...	Patient # 1		Patient # 2		Patient # 3	
	Yes	No	Yes	No	Yes	No
Prior to the office visit:						
Schedule a follow-up visit within 48 hours for high-risk patients or within five days for moderate- or low-risk patients?	☐	☐	☐	☐	☐	☐
Have all the information that they needed about the patient prior to the visit?	☐	☐	☐	☐	☐	☐
During the office visit:						
Ask the patient to explain his/her goals for the visit?	☐	☐	☐	☐	☐	☐
Determine need to adjust medications or dosage?	☐	☐	☐	☐	☐	☐
Discuss advance directives?	☐	☐	☐	☐	☐	☐
Instruct patient in self-management, having patient repeat back?	☐	☐	☐	☐	☐	☐
Explain warning signs to the patient and how to respond, having patient repeat back?	☐	☐	☐	☐	☐	☐
Provide instructions for seeking emergency and non-emergency care?	☐	☐	☐	☐	☐	☐
At the conclusion of the visit:						
Print reconciled medication list with copies for patient, family, and community providers?	☐	☐	☐	☐	☐	☐
Communicate revisions to the care plan to patient, family, and community providers?	☐	☐	☐	☐	☐	☐
Make next appointment as appropriate?	☐	☐	☐	☐	☐	☐

Observation Guide: Observing Current Processes for the First Post-Hospital Visit

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 new questions do you have? What are you curious about?

What assumptions that you held previously are now challenged?

As a result of the findings from these observations, what do you plan to test?

- 1.
- 2.
- 3.
- 4.

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
Patients 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.
Patients 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 activity	Do you know why early recognition and treatment of stroke are 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 lb. 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

Institute for Healthcare Improvement
How-to Guide: Improving Transitions from the Hospital to the Clinical Office Practice to Reduce Avoidable Rehospitalizations

Generic	Heart Failure	COPD	Stroke	Chronic Kidney Disease	Mental Health
					others
Patients 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 lb. 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 or more lbs. in 3 days - Swelling in legs, ankle, 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 - You are unable to take your medications.	What is your plan of action for worrisome symptoms or situations? What should you watch for? What would you do if this happens? When would you call? Who would you call? What would you do if...?
Patients 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?	- Do you know the name of your rescue inhaler? - Show me how to use your inhaler.	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?

Signs of Heart Failure

If you have one or more of these symptoms:

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

Call doctor _____
at _____



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



**VISITING
NURSE
ASSOCIATION**

Heart Failure Action

What zone are you in today?

You need to do these things

Green Zone	All Clear – You are feeling well Your symptoms are under control You have: • No shortness of breath • No weight gain more than 2 pounds (it may change 1 or 2 pounds some days) • No swelling of your feet, ankles, legs, or stomach • No chest pain	• 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
Yellow Zone	Caution – This zone is a warning You need to take action You have: • 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
Red Zone	EMERGENCY – You feel you are in danger 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)

Observation Guide: Observing Current Processes for Patient Teaching

Observe patient teaching as it exists today. Observe three teaching sessions (done in the usual way) conducted by nurses or physicians. Reflect upon what you observed to discover what went well and where there are opportunities for improvement.

What do you predict you will observe?

Did the care team member(s)....	Patient # 1		Patient # 2		Patient # 3	
	Yes	No	Yes	No	Yes	No
Use simple language and terminology?	☐	☐	☐	☐	☐	☐
Use patient-friendly teaching materials?	☐	☐	☐	☐	☐	☐
Request that the patient Teach Back what was understood in patient's own words?	☐	☐	☐	☐	☐	☐
Use non-shaming language in the Teach Back request?	☐	☐	☐	☐	☐	☐
Display a warm attitude?	☐	☐	☐	☐	☐	☐
Use a friendly tone of voice?	☐	☐	☐	☐	☐	☐
Display comfortable body language?	☐	☐	☐	☐	☐	☐
Ask "Do you understand?" or "Do you have any questions?" (<i>Avoid this language</i>)	☐	☐	☐	☐	☐	☐
Use teaching materials in patient's language of choice?	☐	☐	☐	☐	☐	☐

Reflections after observations are completed (to be shared with the entire team):

What did you learn?

Observation Guide: Observing Current Processes for Patient Teaching

How did your observations compare to the predictions?

What, if anything, surprised you?

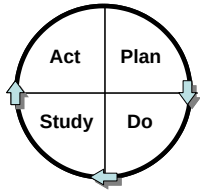
What new questions do you have? What are you curious about?

What assumptions about patient education that you held previously are now challenged?

As a result of the findings from these observations, what do you plan to test?

- 1.
- 2.
- 3.
- 4.
- 5.

Data Reporting Guidelines for Office Practices



PDSA Worksheet

DATE _____

Change or idea evaluated: _____

Objective for this PDSA cycle: _____

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

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:

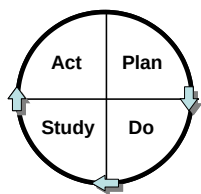
Carry out the Plan; document problems and unexpected observations; collect data and begin analysis.

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.



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: Improve patient understanding of HF self-care by using the zone 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.

An 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 11th and report on her experience.

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

- 1) 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 10th, but there was on the 11th. 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.

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 patients 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.

Spread Tracker Template

A=Planning B=Start C=In Progress D=Fully Implemented

	Pilot Clinic 1	Spread Clinic 1	Spread Clinic 2	Spread Clinic 3	Spread Clinic 4
Change 1	D	C	A	B	C
Change 2	D	C	B	B	C
Change 3	D	C	A	A	C
Change 4	D	C	B	A	B
Change 5	C	D	C	C	A
Change 6	C	D	C	C	A
Change 7	C	D	A	C	A
Change 8	C	D	A	C	A

Cross-Walk of MA PCMHI and STAAR Hospital-Based Key Changes

STAAR Program	PCMHI Initiative
Perform an Enhanced Assessment of Post-Hospital Needs - Involve the patient, family caregiver(s) and community provider(s) as full partners in completing a needs assessment of the patient's home-going needs. - Reconcile medications upon admission - Identify the patient's initial risk of readmission - Create a customized discharge plan based on the assessment.	Empanelment Primary care practitioner takes responsibility for knowing his/her panel of patients and partnering to manage care across the care continuum
Provide Effective Teaching and Facilitate Enhanced Learning - Involve all learners in patient education. - Redesign the patient education process. - Redesign patient teaching print materials. - Use Teach Back	Patient-Centered Care - Make sure the patient understands and agrees to care - Patient engagement through goal setting and care plan development Team-based Care - Maximize provider-term communication - Continuity of care
Provide Real-Time Handover Communications - Give patient and family members a patient-friendly post-hospital care plan which includes a clear medication list. - Provide customized, real-time critical information to next clinical care provider(s). - For high-risk patients, a clinician calls the individual(s) listed as the patient's next clinical care provider(s) to discuss the patient's status and plan of care.	Care Coordination - Two-way communications with other providers - Tracking and management of care transitions - Transitional care within 48 hours Enhanced Access - Planned care at every visit
Ensure Post-Hospital Care Follow-up - Reassess the patient's medical and social risk for readmission. - Prior to discharge, schedule timely follow-up care and initiate clinical and social services as indicated from the assessment of post-hospital needs.	Care Coordination - Two-way communication with other providers - Tracking and management of care transitions

Partnering with Patients and Families to Accelerate Improvement Readiness Assessment

Name of Organization _____

			
Area	Current Experience: make a mark (an X, a circle, or anything that is easy to read) in the box that best describes your team or organization's experience.		
Data transparency	We have not discussed the possibility of sharing performance data with patients and family 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 works 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)?			

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