Guide for Field Testing:

Creating an Ideal Transition to the Clinical Office Practice

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

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Introduction

The Institute for Healthcare Improvement (IHI), through a grant supported by The Commonwealth Fund, will soon commence a four-year, multi-state initiative to measurably reduce avoidable rehospitalizations. The primary aims for the first two years of the project will be the creation of a robust learning community and the provision of targeted technical assistance. Development of a multi-state learning community will provide an opportunity for participants to learn from content experts and peers about how to best implement front-line process improvements in transitions in care. IHI experts in improvement, change, transitions of care, and reliability will provide targeted technical assistance in select high-priority areas to address systemic barriers to reducing avoidable rehospitalizations. This guide was created to support participating individuals and organizations in their work over the course of this initiative and beyond to improve transitions of care. In contrast to an IHI How-to Guide, which includes changes that have been tested, this Field Guide includes ideas and potentially effective changes that have not yet been tested.

The Case for Creating an Ideal Transition Home

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

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

Recent studies evaluating hospital discharge have demonstrated that deficiencies in health literacy, patient education, communication among health care providers within and between sites of care, appropriate medical follow-up, and issues related to medications are associated with an increased risk of adverse events.[4,5,6,7,8] According to Clark et al., 81 percent of patients requiring assistance with basic functional needs failed to have a home care referral, and 64 percent said no one at the hospital talked to them about managing their care at home.[4]

This Field Guide focuses on the reception of patients back into the office practice after hospitalization. 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 condition, 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 provide patients with complex medical needs a range of services, including ongoing evaluation and management of clinical conditions, patient education, referral for specialty consultation and testing, care coordination, and development of customized care plans to fit individuals' personal needs and preferences. Through the expanded implementation of the "medical home" model and other chronic care initiatives, providers in primary care practices will soon need to demonstrate competence in managing the needs of patients with complex conditions as they transition through care settings. The approaches presented in this Field 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.

This Field Testing Guide is divided into three sections:

- **Section One** highlights three promising changes to create an ideal transition from the hospital to the clinical office practice.
- **Section Two** outlines a practical step-by-step sequence of activities to assist teams in testing and adapting the changes described in Section One.
- **Section Three** includes tools, resources, and worksheets.

Section One

This section highlights **three promising changes** to create an ideal transition from the hospital to the clinical office practice setting by mitigating the typical failures or problem areas associated with this transition. These changes can be tested and applied in both primary care and specialty care settings.

Creating an Ideal Transition to the Clinical Office Practice

I. 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 appropriate and timely follow-up for discharged patients.
   - Ensure that high-risk patients are seen by the outpatient physician (or a home care or care coordination clinician) within 48 hours after discharge.
   - Ensure that moderate-risk patients receive a follow-up phone call within 48 hours and are seen by a physician within five days.

II. Assess Patient and Initiate New Plan of Care at First Post-Discharge Office Visit

A. Re-evaluate the patient’s clinical status since discharge.

B. Reconcile treatment plan and medications from pre- and post-hospitalization.

C. Assess patient’s goals, wishes, and ability to manage self-care.

D. Initiate a new overall plan of care that is developed collaboratively with patient.

III. Coordinate Care Across Outpatient Providers and Settings

A. Send the new overall plan of care to other clinicians and providers in the community.

B. Establish regular times in the daily office schedule to communicate with other clinicians and providers.

I. Provide Timely Access to Care Following a Hospitalization

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.

Typical failures associated with patients receiving 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 physician cannot easily reach the office practice physician because the outpatient physician is busy with patients in the office or due to problems with phone access and leaving messages;
- Lack of person-to-person contact between hospital and office practice and staff due to a lack of identified individuals to coordinate communication on each end;
- Patient is told to schedule an appointment with their primary or specialty care provider, but is confused about whom they should see and when;
- Lack of agreement and clarity about whether hospital or office practice staff is providing post-discharge phone contact and scheduling home care services;
- Lack of open appointments in the office practice schedule that would allow for post-discharge visits within 48 hours; and
- Patients whose condition rapidly deteriorates are unsure when and 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).

Promising Changes to Test

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

The ability of office practice providers to anticipate the needs of a patient at discharge requires a designated care team member to regularly receive information about the practice's hospitalized patients and use a standardized approach to act on the information.

Who: A designated nurse or other care team member

How:

- Initiates daily contact with a designated hospital contact to obtain and act on information about the practice's hospitalized patients
- Prints out information sent from the hospital about any of the practice's patients who are hospitalized
- Contacts the hospital to clarify any information about patients' clinical status and needs at discharge, especially patients at high or moderate risk for readmission
- Shares information with the other members of the care team in preparation for the post-discharge visit

Tips for Testing:

- Identify the best person in the office practice to serve as the link with the hospital by reviewing current care team member roles and responsibilities.[9] Resources are available from the Dartmouth Institute at the Dartmouth Medical School Clinical Microsystems website at http://dms.dartmouth.edu/cms/materials/workbooks/.
- Ensure that office practice and hospital contacts jointly agree on the information that will be sent to the practice, based on the informational needs of the office practice staff for providing optimal care following discharge.
- Ensure that team members work with the contact person in their practice work so they can serve as a back-up in the event of a staff absence.

I. B. Provide appropriate and timely follow-up for discharged patients.

- **Ensure that high-risk patients are seen by the outpatient physician (or a home care or care coordination clinician) within 48 hours.**
- **Ensure that moderate-risk patients receive a follow-up phone call within 48 hours and are seen by a physician within five days.**

Office practice staff and providers can take the following steps to ensure that patients who have been assessed by hospital staff to be at high or moderate risk for readmission receive the appropriate level of care and support:

Who: Scheduler
How:

- Provides timely appointments for patients being discharged (responding to requests from the hospital staff or patients)

Who: Office manager (or other designated staff member)
How:

- Checks the schedule at the end of each day to identify and follow up with high- or moderate-risk patients who do not show up as expected for their appointments

Tips for Testing:

- If your practice does not have open appointments in the schedule on a daily basis (i.e., no advanced access system), designate a specified number of open appointment slots each day for high-risk patients needing post-discharge visits, based on the predicted demand. Information on advanced access systems is available at: http://www.ihi.org/IHI/Topics/OfficePractices/.
- Provide patients and family members with online access to the office practice so they can directly schedule follow up appointments.
- 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.

II. Assess Patient and Initiate New Plan of Care at First Post-Discharge Office Visit

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

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

- Outpatient physician does not receive a complete discharge summary within 24 hours of the patient's discharge;
- 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 plan of care that they understand and are confident they can follow;
- Patients don't know who and when to call if their condition worsens;
- 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 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.

Promising Changes to Test

II. A. Re-evaluate the patient's clinical status since discharge.

To adequately re-evaluate the patient's clinical status, the outpatient physician needs a record of the patient's care prior to admission and the discharge summary in preparation for the first post-discharge visit.

Who: Physician, nurse practitioner, and care team members

How:

- Prior to the visit, 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.
- On the day of the visit, physician or nurse practitioner conducts a clinical examination of the patient.

Tips for Testing:

- Physician and care team members can use daily team "huddles" or briefings to review needs of patients listed on the day's schedule, including patients recently discharged, to identify patient needs prior to the office visit. http://www.ihi.org/IHI/Topics/Improvement/ImprovementMethods/Tools/Huddles.htm

II. B. Reconcile treatment plan and medications from pre- and post-hospitalization.

During the reconciliation process, the physician should use information from the clinical exam and relevant information from hospital staff and the patient's medical record 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 increase the risk of readmission to the hospital.[6,10,11,12]

Who: Physician or nurse practitioner

How:

- Reviews the discharge summary, the results of the clinical exam, and information about the patient prior to admission.
- Reconciles treatment plan and medications.

Tips for Testing:

- Involve the patient and family in medication reconciliation. http://patientsafety.org/page/109587/
- The physician or a care team member can use a standard medication reconciliation form to identify any unexplained discrepancies in pre-hospitalization and post-discharge medications. http://www.macoalition.org/Initiatives/RMToolkit.shtml and http://www.legacyhealth.org/body.cfm?id=1878

II. C. Assess patient's goals, wishes, and ability to manage self-care.

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.[13] 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.[14,15] Provider assessment and understanding of the patient's wishes and ability for self-care is a crucial step in engaging patients.

The ability to understand and follow the instructions needed 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.

Who: Physician and other care team members

How:

- Explains the recommended treatment plan to the patient and family caregivers.
- Uses the "Teach Back" process to close understanding gaps between health care providers and the patient and family caregivers.[16] Teach Back involves asking the patient or family caregiver to recall and restate in their own words what they thought they heard during education or other instructions.
    - The clinician asks in a non-shaming way for the individual to explain in his or her own words what he/she understood.

  - 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.[17] This technique is used routinely in diabetic education and physical therapy.
  - The clinician assesses the patient's ability and confidence to perform intended self-care goals, 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).[16,18]
- 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 plan of care.

Tips for Testing:

- Identify the key learners, such as patient, family members, and friends.
- Ask the patient or family members how they learn best (i.e., 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 condition and instructions provided by clinicians. See http://foundation.acponline.org/hl/video/healthliteracy.wmv, including tools specifically designed to raise awareness, and be able to take action to improve care for minority Americans and those from other cultures. See http://www.commonwealthfund.org/Content/Resources/2004/Feb/Worlds-Apart--A-Film-Series-on-Cross-Cultural-Health-Care.aspx
- Ask Me 3 http://www.npsf.org/askme3/ and tools such as Agenda Setting Communication Cards can also be used to support patient communication and education. See http://www.design-council.org.uk/en/Case-Studies/All-Case-Studies/RED---Diabetes-/.
- Practice Teach Back and other teaching methods initially with the last patient of the day to reduce disruption to the schedule while developing the new technique.

II. D. Initiate a new overall plan of care that is developed collaboratively with patient.

The overall plan of care should include specific actions that the care team, patient, and family members agree to carry out to meet the needs of the patient.

Who: Designated care team member (in collaboration with patient and family members)

How:

- 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 states the elements of the new comprehensive plan of care:
  - Fosters agreement with the patient on specific forms of follow-up contact and support, such as case management for 8-12 weeks following discharge or use of telemonitoring.
  - Checks that patients have the resources they need, such as a scale for weight monitoring, to follow the care plan.
  - Gives the patient an emergency contact number – an individual on the care team the patient knows can reach at any time – and ensures that the patient and family members know when to seek advice or assistance.
  - When the patient's clinical condition warrants, discusses 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.
- Schedules next office visit or phone contact and any additional support services 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).
  - Identifies a specific follow-up schedule (e.g., daily, weekly) for phone contact and office visits based on the assessment of patient need and ability for self-care.

Tips for Testing

- Refine the overall care plan based on patient input and care team assessments.
- Determine whether the patient is using the emergency contact number appropriately to assess the patient's understanding of self-management.
- Consider information technology solutions to connect patients and physicians or create a shared care plan for both patients and providers. http://www.patientpowered.org/login.aspx

III. Coordinate Care Across Outpatient Providers and Settings

Too often patients receive care that is fragmented and episodic. This is particularly true for patients with chronic conditions or complex clinical needs.[19] 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.[20,21,22,23] For this reason, care coordination is especially important for patients recently discharged from the hospital.

Typical failures associated with coordination of care across outpatient providers and settings include the following:

- Primary care physicians have not been involved in the care of the patient in the hospital and therefore fail to implement the medication and treatment changes ordered at discharge;
- 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; and
- Poly-pharmacy issues due to prescriptions by multiple providers and a lack of oversight for the patient's overall medication regimen or treatment plan.

Promising Changes to Test

III. A. Send the new overall plan of care to other clinicians and providers in the community.

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- or herself, to all providers caring for the patient.

Who: Physician or a member of the care team responsible for immediate post-discharge care

How: Sends the care plan developed at the first post-discharge office visit to other clinicians and providers in the community, highlighting any changes in medications since discharge.

Tips for Testing:

- Ensure that primary care providers and specialists agree on a preferred method of communication (e.g., phone, e-mail). http://www.ihi.org/IHI/Topics/OfficePractices/Access/Tools/ServiceAgreementYellowCard.htm
- Ensure that all providers agree on a timeframe for the physician conducing 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 at the next interaction.

III. B. Establish regular times in the daily office schedule to communicate with other clinicians and providers.

In addition to receiving the care plan immediately following the first post-discharge office visit, key providers need to be sent continuous updates on the patient's condition and progress in following the care plan.

Who: Physician or member of the care team responsible for ongoing post-discharge care

How:

- Schedules time at one or more points during the day to either initiate or respond to messages from other clinicians.

Tips for Testing:

- Facilitate agreement between the physician and care team members on how best to coordinate the incoming and outgoing communication with other clinicians and providers.
- Consider using a Shared Care Plan that is accessible to all providers as well as patients. http://www.patientpowered.org/login.aspx

Section Two

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

Step 1. Form a Team

Form a team with representatives from your office practice or clinic. Together, team members will identify opportunities for improvement and test changes in care processes to optimize the transition from the hospital to the office practice setting. Improvement efforts should focus on acquiring the necessary information to properly care for the patient and reconcile the care plan and medications with the patient's condition, engaging patients and family members as partners in care, and facilitating timely appointments when the patient's condition changes.

Consider choosing team members from the following:

- Patients and family members
- Physicians
- Nurse practitioners
- Nurses
- Office managers
- Schedulers

Whenever possible, create a team that includes representatives from across the care continuum, such as hospital staff, home care nurses, physicians and staff in office practice, patients, and family members. By understanding the mutual interdependencies between the "sending location" and the "receiving location" for care, the team can work collaboratively to create ideal transitions. Together, members of the team will learn how to improve handoffs at transition of care.

"How to Improve: Forming the Team." http://www.ihi.org/IHI/Topics/Improvement/ImprovementMethods/HowToImprove/formingtheteam.htm.
Institute for Family-Centered Care. http://www.familycenteredcare.org/.
New Health Partnerships www.newhealthpartnerships.org

Physicians and staff in medium or large clinic or office practice settings need the support of management and leadership to improve transitions in care. In contrast, in smaller practices the physicians, nurses, and administrative staff who compose the care team must take on the leadership role in improvement efforts. Improvement teams in both settings need support to develop safer, more reliable care transitions and reduce potentially avoidable readmissions.

Structures for Enabling the Work of Improvement Teams in the Office Practice Setting
✓ Ensure that hospital and office practice contacts agree on the best method to send or transmit the discharge summary to the office practice within 24 hours of discharge (e.g., fax or secure e-mail). ✓ Establish timely appointment availability for patients discharged from the hospital. ✓ Develop standard processes and competencies for teaching patients and checking understanding. ✓ Use a predetermined process for deciding which provider is in charge following a hospitalization. ✓ Build service agreements between primary care and specialists to coordinate care and smooth communication. ✓ Establish standard methods for communicating with staff and providers at other care settings, including other office practices, hospitals, and home care agencies.

Step 2. Identify Opportunities for Improvement

2a. Interview patients recently readmitted within 30 days of discharge and their family members.

Use Worksheet A, "Interviews with Patients and/or Family Members about a Recent Re-hospitalization," on pages 29-20 of this Guide.

2b. Evaluate the effectiveness of the current teaching processes to check patient understanding of self-care.

Use Worksheet B, "Evaluate Effectiveness of Patient Teaching Process," on page 31 of this Guide, with three to five patients during an office visit. Observe teaching and identify areas for improvement. Note whether and how the teacher assessed what the patient understood. Did the teacher use a yes-or-no question? Did he or she use repeat demonstration? Did the teacher ask the patient to share what he or she learned?

2c. Review patient satisfaction 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 patient's' perceptions of how well the care team provided them with needed information and how well prepared they are to take care of themselves following a visit. If patient satisfaction and experience data are 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.

2d. Review data on patients who are readmitted to the hospital within 30 days of discharge to identify trends and opportunities for improvement.

Readmission data are often difficult for office practice staff to obtain unless the practice is part of an integrated delivery system with 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 practices for gathering data and monitor trends in readmissions through further study and testing.

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

3a. Discuss findings from Step 2 with the entire care team in the office practice.

Provide information from:

1) Interviews with patients who have been readmitted within 30 days after discharge;
2) Assessments of teaching effectiveness and patient learning;
3) Data on trends in patient satisfaction with transitions and support for self-care; and
4) Data on trends in 30-day readmission rates.

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

If possible, focus improvement efforts on the patients that represent about half the hospital readmissions in your practice. If there are few readmissions or a very small patient segment representing half the readmissions, simply work on reducing all readmissions and improving transitions in care when patients are discharged. 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. Later, expand and spread improvements to all patients.

3c. Write an aim statement.

Aim statements communicate to all stakeholders the magnitude of change and the time by which the change will occur. Aim statements also anchor a team to the improvement work. Develop a clear aim statement for reducing all readmissions. Aim statements include five essential elements:

- What to improve;
- Where (specific provider or the entire practice or clinic);
- For which patients;
- By when (date specific deadline); and
- A measurable goal.

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

> *Within the next 12 months, our practice will improve care for discharged patients at highest risk for re-hospitalization by 50 percent.*

For more on setting aims, refer to:
http://www.ihi.org/IHI/Topics/ChronicConditions/AllConditions/HowToImprove/ChronicSettingAims.htm

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

Below are the three promising changes to create an ideal transition from the hospital to an office practice. For each of these changes, the table lists several process measures.

Deliver Timely Access to Care Following a Hospitalization → **Assess Patient and Initiate New Plan of Care at First Post-Discharge Visit** → **Coordinate Care Across Outpatient Providers and Settings**

Promising Changes	Process Measures
Deliver Timely Access to Care Following a Hospitalization	• Percentage of high-risk patients who have a post-discharge visit within 48 hours of discharge • Percentage of moderate-risk patients who have a post-discharge visit within five days of discharge
Assess Patient and Initiate New Plan of Care at First Post-Discharge Visit	• Percentage of discharged patients who can Teach Back at least two-thirds of information they are taught • Percentage of patients who leave the first post-discharge visit with a plan of care

Coordinate Care Across Outpatient Providers and Settings	• Percentage of patients who answer "Yes, all of the time" or "Yes, most of the time" to this or a similar question: "Do doctors, nurses, and other health professionals who see you regularly keep good communication and contact with each other?" www.Howsyourhealth.com

Begin designing standard work by focusing on one of the promising changes depicted in the three boxes. Select a change based on the interests and passion of the team or the area with the most problems or failures. Recognize that each of the changes is composed of several processes. For example, within the box, "Assess Patient and Initiate New Plan of Care at First Post-Discharge Visit," is the promising change to test, "Assess Patient's Goals, Wishes, and Ability for Self-Care." The team can use Teach Back to improve this process. See Section I, IIC. on pages 11-13.

Select a process and describe the standard work precisely, including the following:

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

Ask members of your team, "What would I see if I could observe this being done?" Design the work to be flawless, each and every time, regardless of who does it. Use aids and reminders, designing them into the system. Utilize information technology to assist design. For example, if Teach Back occurs immediately after the clinical exam, the team could design an automated pop-up reminder on the computer screen or insert a reminder in the patient record near the area in which the physician documents the results of the clinical exam. Take advantage of work habits and patterns. For example, build Teach Back into the established process the office nurse uses when he or she reviews medications and instructions with the patient at the end of the visit.

Use small tests of change to refine the design and learn how a standard design actually works. For example, if a team finds that use of Teach Back in the exam room is not ideal because it prevents the room from being used by other patients, they could test whether designating another space contributes to better flow and efficiency in the office. Understand that developing reliable processes may take more than one step. The first goal is that the standard work process is reliably performed 80 to 90 percent of the time. Later, the team can aspire to have the process work 99 or even 100 times out of 100.

Increase reliability by testing the standard work and process design. Make improvements and adapt the process to increase reliability. Whenever the process does not work as designed, ask nurses or office staff involved in the process to conduct small tests of change to improve the process. Remove each problem or failure and adapt changes to improve the reliability of the process. Choose tests of change based on information about process failures and ideas from staff.

Other tips:

- Keep tests small and specific.
- Use one test of change to inform the next test.
- Refine the next test based on learning from the previous one.
- Expand test conditions to assess whether a change works at different times of day (e.g., morning and afternoon, evenings, when the office is adequately staffed, in times of staffing challenges).
- Continue the cycle of learning and testing to improve process reliability.
- Collect enough data to evaluate whether a test was successful, has promise, or needs adjustment.

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

An example of small tests of change for the Teach Back process:

- Test 1**:** One nurse, on one day, tests whether using Teach Back with one patient who has heart failure helps the patient learn the reasons to call the physician for help after discharge (e.g., weight gain, difficulty breathing, exhaustion). Following Teach Back, the nurse analyzes the percentage of items taught that the patient can teach back.

- Test 2: The same nurse then tests whether a video is more effective than verbal teaching as a learning tool. She or he shows a second patient the video and documents the percentage of signs and symptoms the patient can teach back.
- Test 3: The same nurse offers all patients on one day the choice of learning through personal instruction or video.
- Test 4: The nurse tests whether using Teach Back on every day of the patient's stay increases retention. The nurse tests the Teach Back process with one patient on each day of the patient's stay.

Identify problems with the process and test repeatedly until all problems are addressed. Share the knowledge gained in a systematic fashion throughout the hospital and health care system, by sharing with staff, leaders, patients, family members, and medical staff members and their office staff. See Step 7 for information on spreading the Teach Back process.

http://www.ihi.org/IHI/Topics/Improvement/ImprovementMethods/HowToImprove/tipfortestingchanges
http://www.ihi.org/IHI/Topics/Improvement/ImprovementMethods/HowToImprove/testingchanges.htm

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

5a. Identify process failures.

Identify and address process failures or problems. For example, an optimal transition requires the office staff to initiate daily contact with the hospital to identify patients who may be hospitalized and ready for discharge. An instance in which this communication does not occur is a process failure. Address failures as soon as possible after they occur. Seek to understand what caused the problem and why. Every failure is the voice of the process signaling a problem. When working to improve transitions in care settings, speak with patients and family members, clinicians in the community, and staff from home care agencies and nursing homes. Learn whether and how a transition could have been better.

5b. Identify outcome failures.

Identify failures that contribute to not achieving the desired outcomes. An example of an outcome failure is the situation in which a patient is discharged even if he/she and the family caregiver failed Teach Back. A failure in Teach Back indicates a patient at high risk for readmission. After identifying failures and redesigning the process to prevent an outcome failure, standardize the process and further assess its performance.

When staff members work in a standard process, they describe the way work gets done the same way. Every time a staff member's description varies from the defined standard process, it represents an opportunity for process failure. For example, ask staff members who regularly use Teach Back to describe the Teach Back reliability goal and outline the detailed process for teaching and facilitating learning for patients and family members. Listen for phrases like, "it depends," which indicate ambiguity or process variation. Strive to understand the reasons for the process variation and work toward standardization. Clarify roles, tasks, and processes to improve standardization and reliability. Elicit improvement ideas from staff. Use the ideas to conduct additional small tests of change.

Please refer to the IHI white paper and the on-demand video for more information about reliability.

For the IHI White Paper, see
http://www.ihi.org/IHI/Results/WhitePapers/ImprovingtheReliabilityofHealthCare.htm
For the on-demand video, see
http://www.ihi.org/IHI/Programs/AudioAndWebPrograms/OnDemandPresentationReliability.htm
For more information on flowcharts, see
http://www.ihi.org/IHI/Topics/Improvement/ImprovementMethods/Tools/Flowchart.htm

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

Remember that some failures that occur while creating ideal transitions put patients at risk. Mitigate or correct these failures immediately. A reliable process includes a step that ensures that the process is completed as designed at least 80 percent of the time. There will be situations in which the process is not completed as designed. For this reason, the process design should include a back-up or contingency plan to ensure that when the first step fails, an individual is alerted who can ensure that the step is completed. For example, when a patient is leaving the office on the day of the first post-discharge visit, staff might ask if Teach Back was offered. If not, a nurse completes Teach Back before the patient leaves. If the team finds that the number of times that Teach Back is not completed increases to two or more times out of 10, the team should examine the reasons underlying the failure of the initial process and consider redesign. Likewise, if a patient fails Teach Back on an important aspect of self-care, either the patient needs additional support or a family caregiver should be instructed in the necessary steps, because Teach Back failure suggests the patient is at high risk for readmission.

Develop ways to signal failures in Teach Back of important self-care concepts, and mitigate the failures either during the office visit or at the next point of contact with the patient (e.g., phone call or visit from home care nurse, phone follow up by the office care manager). The desired goal is that the most important processes of the ideal transition to the next care setting work more than 95 times out of 100. Achieving this level of reliability requires a way to identify every failure, mitigate every identified failure, and get feedback about the performance of the process by measuring reliability. Creating this level of reliability requires an understanding of where in the process the defects occur, learning in detail the reasons for the failure, and testing a better way of doing things. Remember to use aids and reminders, building them into the system and using information technology to assist design. Make the desired action the default action. For example, design the system such that all patients receive Teach Back with each office visit or subsequent contact. Take advantage of work habits and patterns. For example, create a system in which the nurse conducts Teach Back at the end of multidisciplinary rounds.

Step 6. Display Measures over Time to Assess Progress

Display measures on a run chart, because data viewed over time can help indicate whether the changes resulted in improvement. Start by gathering the readmission data for the subpopulation of patients identified in Step 2. Continue to display readmission rates in a line chart during the improvement effort to determine whether and how changes resulted in improvement. Review data periodically after implementation to determine whether gains are maintained.

Outcome Measures

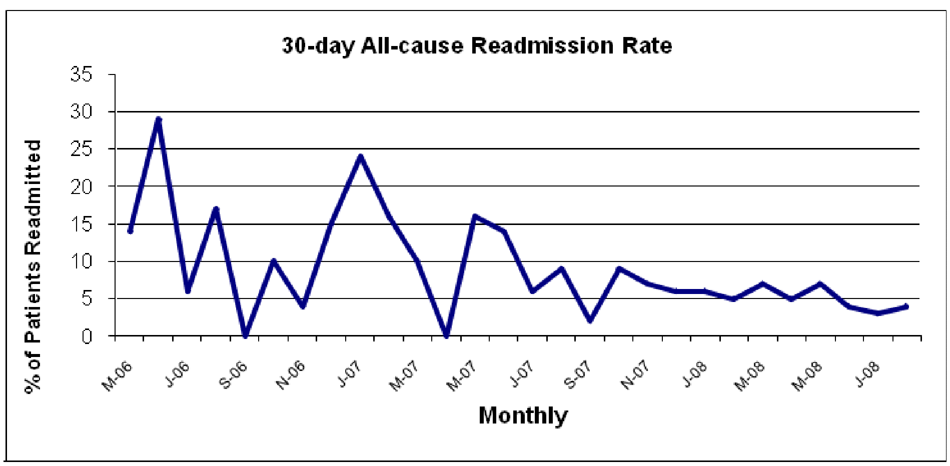
Outcome Measure	Description	Numerator	Denominator
30-day all-cause readmissions for the selected subpopulation for the clinic office practice	Percent of discharges with heart failure or other chronic conditions who were readmitted for any cause within 30 days of discharge for the clinic office practice	Number of discharges with heart failure or other chronic conditions readmitted for any cause within 30 days of discharge Planned readmissions would be excluded (e.g., scheduled chemotherapy).	Number of discharges in the measurement period with heart failure or other chronic conditions Exclusions: Transfers to another acute care hospital, patients who die before discharge
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

* Teams may select a measure that they are already using to track patient satisfaction. An alternative approach would be to begin surveying a sample of patients each month using a survey question to assess patient experience. As an example, the question could be:[24]
"When you think about your health care, how much do you agree or disagree with this statement: 'I receive exactly what I want and need exactly when and how I want and need it.'?"
Patients may respond with I strongly agree, somewhat agree, somewhat disagree, or strongly disagree.

As work progresses on each change, add the process measures listed below. Annotate run charts with changes the team makes. Remember that the goal of all interventions is that the patient receives the desired action at least 95 percent of the time.

- Percentage of high-risk patients who have a post-discharge visit within 48 hours of discharge
- Percentage of moderate-risk patients who have a post-discharge visit within five days of discharge
- Percentage of discharged patients who can Teach Back at least two thirds of information they are taught
- Percentage of patients who leave the first post-discharge visit with a plan of care
- Percentage of patients who answer "Yes, all of the time" or "Yes, most of the time" to this or a similar question: "Do doctors, nurses, and other health professionals who see you regularly keep good communication and contact with each other?"

Share data with clinic staff, physicians, and senior leaders. Data show results, reinforce positive change, and can inspire a group to achieve even more. Reflect on lessons learned from both successful and failed tests of change. Develop the habit of challenging assumptions, and use stories that reflect learning from the project to educate staff. The following graph shows how an office practice team would chart their data to show readmission rates for their selected population of patients over time.[25, 26]



Step 7. Implement and Spread the Reliable Design and Processes

7a. Implement reliable design.

Implement changes that work effectively and are reliable 99 times out of 100. The changes should work under a variety of conditions. Learn from each test and refine changes through iterative PDSA cycles. Foster permanent change by creating new policies and procedures, developing a communication plan, training staff, updating new hire orientation, and monitoring data to maintain gains.

7b. Spread changes.

For clinics and office practices from large health systems with multiple clinic sites, leadership should take responsibility for spreading changes to all sites and commit sufficient resources to support spread. Leaders should measure and monitor outcomes of spread efforts. Pilot units should use a variety of methods (e.g., communication boards, emails to staff, newsletters, and town hall meetings) to inform individuals throughout the organization about the changes they have made to improve transitions in care.

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

Worksheet A:
Interviews with Patients and/or Family Members about a Recent Rehospitalization

Ask Patient and/or Family Members:

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

2. ***Did you have a physician office visit before returning to the hospital? Yes____ No____***
   - ***If yes, which physician (PCP or specialist) did you see?***
   - ***If not, why not?***

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

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

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

6. ***Describe your typical meals since you got home.***

Ask Care Team Members:

Interview physicians, nurses, or others who know the patient.

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

Write a brief descriptive story about the patient's circumstances that contributed to the readmission.

Worksheet A:
Interviews with Patients and/or Family Members about a Recent Rehospitalization (page 2)

Develop an overall summary of all of your reviews and discuss with your team.

What did you learn? ____

____

What were the most common failures discovered? ___________________________

____

What trends or themes emerged? ______________________________________

____

What, if anything, surprised you? ______________________________________

____

What new questions do you have? _____________________________________

____

What are you now curious about? _____________________________________

____

What do you think you should do next? __________________________________

____

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

____

____

____

Worksheet B: Evaluate the Effectiveness of the Patient Teaching Process

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

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

Patient #1____

Patient #2____

Patient #3____

Patient #4____

Patient #5____

What did you learn? ____

____

What trends or themes emerged? ____

____

What, if anything, surprised you? ____

____

What new questions do you have? _______________________________________

____

What are you now curious about? _______________________________________

____

What do you think you should do next? ___________________________________

____

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

____

Section Three

This section includes an annotated list of resources that are organized under the three promising changes introduced in Section One.

I. Provide Timely Access to Care Following a Hospitalization

Tools to Help Identify Care Team Roles

The website of the Dartmouth Institute at the Dartmouth Medical School Clinical Microsystems provides tools that office-based staff and providers can use to identify roles for team members to reduce rehospitalizations. The tools include separate workbooks for primary and specialty care practices.
http://dms.dartmouth.edu/cms/materials/workbooks/

Primary Care Practice Resources—Personal Skills Assessment

This two-page assessment tool is designed to help primary care office-based staff and providers better understand the knowledge and skills of each care team member to better match individuals with the work needs of the care team.
Assessing, Diagnosing, and Treating Your Outpatient Primary Care Practice, pp. 14-15.

Primary Care Practice Activity Survey Sheet

This worksheet helps the team assess the actual day-to-day activities of each member of the care team. The tool can identify mismatches between skill level and current role. It also can help team leaders redesign the team to better meet patient needs and contribute to office efficiency.
Assessing, Diagnosing, and Treating Your Outpatient Primary Care Practice, p. 15.

Specialty Care Practice Resources–Personal Skills Assessment

This two-page assessment tool is designed to help specialty care office-based staff and providers better understand the knowledge and skills of each care team member to better match individuals with the work needs of the care team.
Assessing, Diagnosing, and Treating Your Outpatient Specialty Care Practice, pp. 11-12.

Specialty Care Practice Activity Survey Sheet

This worksheet helps the team assess the actual day-to-day activities of each member of the care team. The tool can identify mismatches between skill level and current role. It also can help team leaders redesign the team to better meet patient needs and contribute to office efficiency.
Assessing, Diagnosing, and Treating Your Outpatient Specialty Care Practice, p. 13.

Scheduling Systems to Build Clinic Availability

Staff and managers in office-based practices can use this tool to eliminate delays in providing post-discharge appointments. The tool outlines steps for better understanding and managing the supply and demand for appointments by either reserving appointment slots for discharged patients or creating a scheduling system with open slots each day to accommodate same-day requests for appointments.

http://www.ihi.org/IHI/Topics/OfficePractices/

II. Assess Patient and Initiate New Plan of Care at First Post-Discharge Office Visit

A Method for Anticipating and Meeting Patient Needs at a Visit

A team "huddle" is a simple step that staff and providers in an office practice can take to anticipate the needs of patients arriving each day for appointments. This brief meeting, which should include all members of the care team, provides a review of the day's schedule to ensure that all appropriate resources are in place and make any necessary adjustments in team roles and responsibilities for that day. Instructions on planning and conducting a huddle are available here:

http://www.ihi.org/IHI/Topics/Improvement/ImprovementMethods/Tools/Huddles.htm

Tools for Medication Reconciliation – A Collaborative Patient-Centered Model

This toolkit outlines the steps necessary to create a community-based, patient-centered medication reconciliation process and provides specific templates and resources, such as:

- Project goals and objectives;
- Patient interview questions;
- Focus group questions;
- Health care provider interview questions;
- Time-in-motion study tool;
- Clinic process flow chart;
- Medication list evaluation form; and
- Medication bag evaluation form.

http://patientsafety.org/page/109587/

Tools for Medication Reconciliation – Outpatient Medication Audit

Care team members should use a medication reconciliation process and associated materials to reconcile a patient's home medications with the medications he or she receives in the hospital and medication changes ordered at discharge. The process reduces medication errors and improves patient safety by ensuring that the patient understands his or her medication regimen and that all caregivers across the continuum of care have accurate and up-to-date information regarding the patient's medications.
http://www.legacyhealth.org/body.cfm?id=1878

Tools for Medication Reconciliation – The Reconciling Medications Toolkit

The Reconciling Medications Toolkit is designed to aid providers in the three-step process of medication reconciliation: 1) checking that the patient's home medication list is complete, 2) ensuring that physicians use the home medication list to write orders, and 3) verifying that physicians' orders correspond to the home medication list. This three-step process can prevent medication errors and the adverse drug effects that can occur as a result.

The toolkit developed by the Massachusetts Coalition for the Prevention of Medical Errors (MassPRO) contains the following information for providers:

- Instructions on how to create a medication reconciliation form;
- Examples of medication reconciliation forms from other facilities;
- Examples of hospital policies regarding medication reconciliation;
- Staff education materials;
- Process flow charts;
- Spreadsheets for data collection; and
- Implementation planning tools.

http://www.macoalition.org/Initiatives/RMToolkit.shtml

Tools for Staff about Patient Education and Engagement – Video

This six-minute video from the American College of Physicians can be used to raise staff awareness about the struggle of many patients to understand their clinical condition and self-management tasks and the need for clinicians to provide effective self-care instructions.
http://foundation.acponline.org/hl/video/healthliteracy.wmv

Tools for Staff about Patient Education and Engagement – Cultural Diversity Video

The film series called *Worlds Apart* documents the experiences of minority Americans and patients from other countries in the US health care system and dramatizes communication between patients and their doctors, tensions between modern medicine and cultural beliefs, and the ongoing burdens of racial and ethnic discrimination. The tool includes film clips and a study guide.
http://www.commonwealthfund.org/Content/Resources/2004/Feb/Worlds-Apart---A-Film-Series-on-Cross-Cultural-Health-Care.aspx

Tools for Patient Education and Engagement – Teach Back

The Society of Hospital Medicine BOOST toolkit includes a simple tool that can help providers and other staff master an important aspect of Teach Back: the process of "closing the loop" to improve patient understanding.
http://www.hospitalmedicine.org/ResourceRoomRedesign/RR_CareTransitions/PDFs/Teach_Back_.pdf

Tools for Patient Education and Engagement – Ask Me 3

Ask Me 3 is a communication tool that highlights three simple but essential questions that patients should ask their providers in every health care interaction. The Partnership for Clear Health Communication offers free posters and brochures about Ask Me 3 in English and Spanish.
http://www.npsf.org/askme3/

Resources on health literacy are also available from the American Medical Association:
http://www.ama-assn.org/ama/pub/about-ama/our-people/affiliated-groups/ama-foundation/our-programs/public-health/health-literacy-program/health-literacy-kit.shtml

Tools for Patient Education and Engagement – Agenda-Setting Communication Cards

Working in collaboration with patients with diabetes, researchers in the UK created agenda-setting communication cards to empower patients to set the agenda in health care discussions. Each card presents a common issue faced by patients with diabetes (e.g., managing exercise, making healthy lifestyle choices, and monitoring vital measures). Patients select the cards that represent the issues of highest priority and use these cards to guide the discussion with the provider. More information on the cards is available here:
http://www.design-council.org.uk/en/Case-Studies/All-Case-Studies/RED---Diabetes-/

Tools for Patient Education and Engagement

The Shared Care Plan

The Shared Care Plan is an online self-management tool that helps patients monitor their health. Patients (and others whom the patient specifies) can access the online information from any Internet-ready computer around the world. Providers can access and use the Shared Care Plan to help better coordinate care with the patient. http://www.patientpowered.org/login.aspx

The Care Transitions Program

The Care Transitions Program at the University of Colorado at Denver and the Health Sciences Center has resources for creating personal health records on their website, including an example of a simple personal health record: http://www.caretransitions.org.

Personal Health Records

Other examples of personal health records are available from the American Health Information Management Association: http://www.myphr.com/your_record/free_forms.asp

III. Coordinate Care Across Outpatient Providers and Settings

Tools for Coordinating Care – Service Agreements

Service agreements between primary care physicians and specialists define the list of conditions that should addressed by primary care providers and the process for making a prompt referral to specialty care if needed. A service agreement also can outline a process for communication between primary care physicians and specialists regarding the appropriate management of a patient's care over time, especially following a hospitalization.

http://www.ihi.org/IHI/Topics/OfficePractices/Access/Tools/ServiceAgreementYellowCard.htm

Tools for Coordinating Care – the Shared Care Plan

The Shared Care Plan is an online self-management tool that helps patients monitor their health. Patients (and others whom the patient specifies) can access the online information from any Internet-ready computer around the world. Providers can access and use the Shared Care Plan to help better coordinate care with the patient.
http://www.patientpowered.org/login.aspx

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