

# Re-Engineered Discharge (RED) Toolkit



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# Re-Engineered Discharge (RED) Toolkit

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**Samples and Forms:** available online at [www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html)



# Tool 1: Overview

## Purpose of the Toolkit

A variety of forces are pushing hospitals to improve their discharge processes to reduce readmissions.<sup>1</sup> Researchers at the Boston University Medical Center (BUMC) developed and tested a set of activities and materials for improving the discharge process, which they called the Re-Engineered Discharge (RED). Research showed that the RED was effective at reducing readmissions and posthospital emergency department (ED) visits.<sup>2</sup>

The Agency for Healthcare Research and Quality (AHRQ) contracted with BUMC to develop this toolkit to assist hospitals, particularly those that serve diverse populations, to replicate the RED. This overview of the RED toolkit explains why hospitals would want to re-engineer their discharge processes, provides evidence of the RED's impact, and introduces each tool in the toolkit.

The RED consists of a set of 12 mutually reinforcing actions, as outlined in the box below, that the hospital undertakes during and after the hospital stay to ensure a smooth and effective transition at discharge. The RED is the product of 7 years of work supported by funding from AHRQ and the National Heart, Lung, and Blood Institute (NHLBI). Preliminary work included intensive study of the discharge process, borrowing methodologies from engineering to define the RED, such as process mapping, failure mode effect analysis, probabilistic risk assessment, root cause analysis, and qualitative analysis.<sup>19-21</sup> This toolkit is an enhancement of previous RED resources and introduces a new RED component on overcoming language barriers.

### Components of the RED

1. Ascertain need for and obtain language assistance.
2. Make appointments for followup care (e.g., medical appointments, postdischarge tests/labs).
3. Plan for the followup of results from tests or labs that are pending at discharge.
4. Organize postdischarge outpatient services and medical equipment.
5. Identify the correct medicines and a plan for the patient to obtain them.
6. Reconcile the discharge plan with national guidelines.
7. Teach a written discharge plan the patient can understand.
8. Educate the patient about his or her diagnosis and medicines.
9. Review with the patient what to do if a problem arises.
10. Assess the degree of the patient's understanding of the discharge plan.
11. Expedite transmission of the discharge summary to clinicians accepting care of the patient.
12. Provide telephone reinforcement of the discharge plan.

## Reasons To Re-Engineer Your Discharge Process

The hospital discharge is a complex process requiring integrated communications among the inpatient care team, primary care team, community services, the patient, and the patient's caregivers. There are many opportunities for improved discharge processes at U.S. hospitals that, if accomplished, could lead to reduced rehospitalization of patients,<sup>3-7</sup> which is currently at a rate of almost 1 in 5 for patients covered by Medicare.<sup>8</sup> Contributing factors include:

- **Delayed Transfer of Discharge Summary:** There is frequently a delay between the time a patient is released from the hospital and when the primary care doctor receives the discharge summary.<sup>9</sup> This delay means the doctor is not immediately aware of which tests and procedures were done during the patient's hospital stay or what conditions still need attention.
- **Unknown Test Results:** Test results are not always complete by the time the patient leaves the hospital. This means the test results will not be included in the report the patient's primary care doctor receives.
- **Lack of Followup:** Patients themselves often do not fully understand the nature of their health problems or realize they need to make appointments for tests or procedures after leaving the hospital. They may be unable to make appointments due to lack of access to transportation or availability of appropriate doctors/specialists. Research has found that more than one-third of the patients who left the hospital in need of more care (e.g., lab tests or a referral to a specialist) failed to get that care.<sup>10,11</sup>
- **Medicine Reconciliation and Adverse Events:** Confusion about which medicines to take can also lead to problems after a patient leaves the hospital. When patients are admitted to the hospital, many stop taking their regular medicines and start taking new ones. Once they leave the hospital, there is often confusion regarding which of the prehospitalization medicines should be continued. This may result in the patient failing to take needed medicine, taking duplicate medicine, or experiencing adverse drug events or natural remedy interactions.

The results of hospitals' failure to ensure an effective transition have included adverse events, high readmission rates, and high ED visit rates.<sup>8,12,13</sup> Forces are, however, converging to push hospitals toward improving their discharge processes and reducing readmission rates.

One force is that national quality organizations have begun to set standards to address some of the deficiencies of discharge planning. For example, National Quality Forum (NQF) Safe Practice-15 lays out key processes of an effective discharge plan, including communicating discharge information to community providers.<sup>14</sup> NQF has recently endorsed three readmission performance measures: hospital-specific, risk-standardized, and all-cause 30-day readmission rates. The Centers for Medicare & Medicaid Services (CMS) has begun public reporting of these measures.

A second force comes from quality improvement organizations that have set out to help hospitals improve their discharge processes. For example, in the Quality Improvement Organizations' 9th Scope of Work, CMS included a theme titled Patient Pathways (Care Transitions). The goal of this theme was to measurably improve the quality of care for Medicare beneficiaries who transition among care settings, with the goal of reducing readmissions and developing replicable strategies to sustain reduced readmission rates.<sup>15</sup>

A third force is the prospect that payment for readmissions will be changed. In its 2007 report to Congress, the Medicare Payment Advisory Commission (MedPac) identified a potential savings of \$12 billion per year by reducing preventable readmissions.<sup>16</sup> In its June 2008 report, MedPAC recommended that Medicare adopt a bundled payment approach. This means paying a single provider entity (comprising a hospital and its affiliated physicians) a fixed amount to cover the costs of providing the full range of Medicare covered services delivered during an episode of care (e.g., the hospital stay plus 30 days after discharge).<sup>17</sup>

In April 2008 CMS sought public comment on two proposals to revise hospital payments to provide hospitals with financial incentives to reduce avoidable readmissions. The first is to reduce payments

for preventable readmissions. The second is to incorporate readmission rates into the calculation of performance-based payments in the value-based performance plan. The Hospital Readmissions Reduction Program included in the Patient Protection and Affordable Care Act of 2010 states that as of October 1, 2012, Medicare will reduce payments to hospitals with “excess readmission rates” for heart attacks, heart failure, and pneumonia.<sup>18</sup>

## Impact of RED

While hospitals are likely to be motivated to improve their discharge process, with a specific goal of reducing readmissions, they may require support and guidelines to optimize success. A Cochrane review of discharge planning interventions indicated that a number of interventions did not have a measurable impact on readmission rates.<sup>22</sup> The RED, however, has shown significant effects in a randomized controlled trial.<sup>2</sup>

Patients who received the RED experienced a 30 percent lower rate of hospital utilization within 30 days of discharge compared to patients receiving usual care. One readmission or ED visit was prevented for every seven patients receiving the RED. Further, the RED patients cost an average of \$412 less in the 30 days following hospital discharge than patients who did not receive the RED. This represents a 33.9 percent lower observed cost for this group.

These results have important implications for quality of care and costs for the more than 38 million hospital discharges each year in the United States. Additional reasons to implement RED can be found in the box below.

### Why Should Hospitals Use the RED?

#### Improves Clinical Outcomes

- Decreases 30-day readmission by 25 percent.
- Decreases ED use from 24 percent to 16 percent.
- Improves patient “readiness for discharge.”
- Improves primary care provider followup.

#### Meets Safety Standards and Improves Documentation

- Accepted as NQF Safe Practice and endorsed by Institute for Healthcare Improvement, The Leapfrog Group for Patient Safety, and CMS.
- Meets Joint Commission standards.
- Documents the discharge preparation.
- Documents understanding of the discharge plan.

#### Improves Return on Investment

- Reduces costs by \$412 per patient.
- Allows higher level physician billing for discharge.
- May reduce diversion and creates greater capacity for higher revenue patients.
- May improve market share as “preferred provider.”
- Improves relationships with ambulatory providers.
- Prepares for changes in CMS rules regarding readmission reimbursement.

#### Improves Patient Centeredness and Hospital’s Community Image

- Brands the hospital as high-quality facility.
- Improves patient and family satisfaction.

## **New and Improved RED Toolkit**

The Boston University team developed a toolkit describing how it implemented the RED at Boston Medical Center. There were, however, additional implementation issues that needed to be addressed to ensure that the toolkit would be generalizable to a variety of hospital types and patient populations. The RED toolkit has been expanded to provide complete implementation guidance and adapted to address language barriers, cross-cultural issues, and disparities in health care communication and trust. The toolkit now includes five additional tools that provide step-by-step instructions as a springboard for hospitals to proactively address avoidable readmissions. Below is a brief description of each tool.

### **Tool 2: The Re-Engineered Discharge: How To Begin Implementation at Your Hospital**

This tool outlines the steps you need to take to begin implementation at your hospital. It will help you consider all aspects of implementation, from planning your implementation team to identifying potential barriers. For example, it reviews the advantages and disadvantages of integrating the discharge education functions into the duties of the staff nurse responsible for patient discharge versus a strategy of hiring dedicated discharge educators to perform these functions.

### **Tool 3: How To Deliver the Re-Engineered Discharge**

This tool describes various tasks the discharge educators undertake to implement the RED components, from reconciling medicine lists to reviewing the After Hospital Care Plan (AHCP) with the patient. The tool includes instructions about how to create an AHCP, the easy-to-understand booklet for patients with instructions about how to take care of themselves after leaving the hospital.

### **Tool 4: How To Deliver the Re-Engineered Discharge to Diverse Populations**

A culturally competent approach ensures the effective delivery of the RED to all eligible patients and improves the quality of health care service. This tool assists discharge educators in delivering the RED to patients from diverse backgrounds, including diverse language, culture, race, ethnicity, education, literacy, and social circumstance.

### **Tool 5: How To Conduct a Postdischarge Followup Telephone Call**

The postdischarge reinforcement phone call is scheduled within 72 hours of a patient's hospital discharge. The objectives are to review appointments, medicines, medical issues, and actions to take if a nonemergent problem arises. This tool provides a script for the phone call, a form for documenting the phone call, and a role play script that can be used as a model in training callers.

### **Tool 6: How To Monitor RED Implementation and Outcomes**

This tool will help you begin to examine your hospital's current rate of readmissions and implement a program to monitor your hospital's progress. It reviews the reasons for measuring transitional care, suggests implementation and outcome measures, and reviews the availability of data to create benchmarks.

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# Tool 2: How To Begin Implementation of the Re-Engineered Discharge at Your Hospital

## Purpose of This Tool

While you might be motivated to improve the discharge process and reduce the number of readmissions at your hospital, you may not know where to begin. For this reason, the Agency for Healthcare Research and Quality (AHRQ) contracted with Boston University Medical Center (BUMC) to prepare a set of tools to assist hospitals to implement the Re-Engineered Discharge (RED).

As described in the Overview, there are several reasons that hospitals should provide the RED to patients discharged from their facilities<sup>1,2</sup>:

- The RED ensures that all discharged patients who have received the RED understand how to care for themselves in the days after discharge.
- The RED reduces emergency department visits and readmissions. When hospitals decide whether to introduce a new process, the decisionmaking is usually centered on “how much patients benefit” versus “how much it costs.” Rarely are there new processes that result in patient benefit and reduced costs. The RED is such a process.
- Patients and families are highly satisfied with the care they receive when provided RED discharges.

This tool provides a step-by-step approach to how to begin implementation at your hospital.

RED implementation can take from 6 to 12 months or longer, as this process is very site specific. We recommend that before starting to deliver the RED to your patients, you complete each of the steps in this tool. We also suggest that you attempt to identify potential barriers and rate-limiting steps early in the implementation process.

## Eleven Steps To Implement the Re-Engineered Discharge

### Step 1: Make a Clear and Decisive Statement

The first step in successful implementation is for the senior management of the hospital to make a clear and decisive statement about the importance of the hospital providing a comprehensive and safe hospital discharge. You need to be clear as to why this is a priority and what you hope to achieve (e.g., reduced readmission rates, increased patient satisfaction, return on investment).

Hospitals with a motivated executive sponsor who serves as a readmission reduction champion are more likely to successfully implement the RED. The executive sponsor:

- Aligns readmission reduction with the organization's strategies and priorities.
- Sets the vision and the goal that defines success.
- Communicates your commitment to all the key stakeholders.
- Identifies external partners (e.g., insurance companies, health plans).
- Provides resources and staff needed to carry out a successful implementation.
- Selects the project leader.
- Sets policies to coordinate implementation and integrate RED components across organizational boundaries.
- Gets information technology (IT) staff on board.
- Holds people accountable.
- Recognizes and rewards success.

## **Step 2: Identify Your Implementation Leadership**

At least 6 months before starting implementation at your hospital, the executive sponsor should identify a key individual in your organization to be the project leader to manage the day-to-day progress of the project. This could be a nurse, physician, administrator, or other member of the hospital quality improvement and patient safety team. Ideally, this project leader should be well respected within the institution and have the authority to move a new project forward. He or she must understand the importance of fundamental change to the discharge process, be enthusiastic about the RED's success, and have clear buy-in from medical, nursing, and administrative staff that the RED is important to the hospital's success.

The project leader is responsible for:

- Recruiting a collaborative, interdisciplinary implementation team.
- Identifying process owners and change champions.
- Getting buy-in of hospital staff.
- Creating an implementation plan that will work.
- Building skills to support and sustain improvement.
- Troubleshooting as the RED is rolled out.
- Monitoring and reporting progress on key measures and providing feedback.
- Monitoring sustainability.



## Form the Implementation Team

With the assistance of the senior management, the project leader should identify an implementation team that includes participants from key constituencies within the hospital clinical and administrative structure.<sup>3</sup> Consider having representatives from such groups as:

- Patient safety.
- Nursing and physician leadership.
- Case management.
- Hospital administration.
- Hospital IT.
- Hospital pharmacy leadership.
- Patients, family members, and other community members.
- Patient educators.
- Health plans with whom you can partner in delivering the RED.
- Discharge planning.
- Social work.
- Chaplain/clergy.
- Medical records leadership.
- Interpreter services.

The implementation team will need to be freed up so that they can meet regularly under the direction of the project leader. This group will be responsible for operationalizing the RED processes within the hospital and for reporting implementation progress. The implementation team should report regularly through the project leader to the senior management team about results and progress toward achieving hospital goals.

## Identify Process Owners and Change Champions

*Change champions* should include leadership from varying professional groups (e.g., members of the medical and nursing staff). These motivated team members can educate their respective professional groups and advocate for the changes the RED will bring. They are also the representatives and advocates of their respective groups within the RED implementation team. Change champions are also tasked with moving from the planning and pilot stages to sustaining changes and improvements resulting from the RED.

*Process owners* will be the staff members responsible for completing each of the RED components. A single staff person will likely be responsible for several or even most of the components. However, the implementation team must clearly decide who is involved in the completion of each RED component and who is ultimately responsible.

## Get Buy-In From Hospital Staff

Change often begets resistance. The most common source of resistance for a project such as the RED comes from IT departments. IT's involvement is needed if your hospital decides to generate the After Hospital Care Plan (AHCP) using data already in your information systems. IT departments typically have a large workload, so establishing the priority of the RED usually needs to come from senior management.

Another pocket of resistance may come from nursing and physician staff. Depending on who will fulfill the discharge educator (DE) role, the floor nurse job description may change. It is important to conduct a thorough analysis of established responsibilities and processes so that you are not just adding tasks and the job can be reorganized appropriately. Physician staff may now be required to change their policies and processes with regard to medication reconciliation, which may be difficult to implement. Hospital culture is well ingrained, so it will be important for leadership to communicate that following new policies is a priority.

For successful implementation of the RED, it is critical that key constituencies within the hospital clearly understand the clinical, patient safety, and business case for reducing readmissions. The project leader can communicate with key constituencies through grand rounds presentations, inservice training (in person or by Webinar or by bringing in an expert speaker or consultant). Some hospitals have found that a public relations campaign designed for your setting can create a positive climate for implementation.

## Step 3: Analyze Your Readmission Rates and Determine Your Goal

It is important to assess your current readmission rates before you implement the RED. Tool 6, “How To Monitor RED Implementation and Outcomes,” provides details on how to calculate readmission rates. You will use these rates to create clear goals and measure the RED's impact. Some questions that are important to think about up front follow:

- What is the current readmission rate? By specialty? By unit? By diagnosis?
- What is the readmission rate for those with limited English proficiency? Substance abuse or mental health comorbidities?
- Have you benchmarked your hospital against peers and local and regional competitors?
- What is the target patient population (service, unit) for implementation?
- How do you determine success? What data do you need?

There is wide variation among hospitals in readmission rates. The Hospital Compare Web site shows a very wide range of readmission rates among hospitals for the diagnoses of pneumonia, heart failure, and heart attack. Overall, we know that the all-cause readmission rate for Medicare patients (i.e., those 65 and over) is about 20 percent and that there is great regional variation.

The results of implementing the RED at your hospital (and therefore the goals you set for your hospital) very much depend on your baseline readmission rate for the population with whom you plan to intervene. For example, if your 30-day readmission rate is 20 percent or greater, then it is reasonable to expect that a comprehensive discharge process such as the RED will lead to a reduction in the readmission rate of 20 to 25 percent. However, it will be much more difficult to lower a 30-day readmission rate that is already low, say 15 percent or less. To reduce a readmission rate that is

already low, it is necessary to introduce postdischarge community-based interventions such as those described by Eric Coleman<sup>4</sup> and Mary Naylor.<sup>5</sup>

#### **Step 4: Identify Which Patients Should Receive the RED**

Even if your goal is to deliver the RED to all patients discharged from your hospital, it might make sense to roll out the implementation in phases. Based on the analysis of your hospital's needs and the goals you have set, you might want to identify selected subsets of patients who will receive the RED. Possible target populations include:

- Patients with conditions initially targeted by the Centers for Medicare & Medicaid Services (i.e., heart attack, pneumonia, and heart failure) for reduced funding if the hospital has excess readmissions.
- Patients with diagnoses with 30-day rehospitalization rates higher than the national average or higher than peer hospitals in your community.
- Sites of care (floor or unit) or services within the hospital (e.g., surgery, dialysis, post-CABG) that have the highest readmission rates.

Our experience is that most hospitals begin with a targeted implementation focusing on a single diagnosis (usually heart failure), learning as they go and correcting the process as they learn. Some hospitals chose to start small and enroll only heart failure patients from a single unit of the hospital. Other hospitals chose to start with a full hospital implementation and, in at least one case, the RED was implemented simultaneously across an entire hospital system.

Each implementation strategy can be effective if there is sufficient institutional motivation for success. The resources available, your decision style, and the urgency of lowering the readmission rate will all factor into this decision.

#### **Is it Possible To Identify Individuals at High Risk of Readmission?**

A great deal of research has tried to identify those patients with a high probability of readmission. Several analyses of administrative data show that risk factors for readmission include age, length of stay during the index admission, increased comorbidity, and number of recent admissions (often measured in the last 6 months). Not all these data, however, are available at the time of admission.

Furthermore, one recent review of prediction models concluded that most current models do not include variables associated with overall health and function, illness severity, or social determinants of health and therefore perform poorly.<sup>6</sup> Efforts are needed to improve the ability to identify the likelihood of readmission for individual patients.

The RED research team showed that several biopsychosocial determinants of health are related to readmission. Low health literacy, low levels of activation, depressive symptoms,<sup>7,8</sup> substance abuse,<sup>9</sup> no followup with a primary care provider, and male gender<sup>10</sup> were all associated with significantly higher rates of readmission when we controlled for other factors. Homelessness is also a risk factor associated with high readmission rates.<sup>11</sup> These factors could be assessed on admission and could be useful in identifying patients at high risk of readmission.<sup>12</sup>

## Step 5: Create Your Process Map

Creating a *process map* can help you to understand the current discharge process at your hospital. Process maps allow you to visualize your discharge process in a way that is easy to understand. A process map is considered to be an aid for picturing work processes that show how inputs, outputs, and tasks are linked. Process maps have several benefits. They:

- Reveal the tasks that need to be completed in order for a patient to be discharged.
- Give a clearer explanation of a process than words.
- Impart understanding of potential problems.
- Allow participants who carry out individual tasks to see the entire process and they help clarify participants' interactions with other providers.
- Prompt new thinking about how to better prepare patients for discharge.

Your goal should be to map the entire discharge process at your hospital.<sup>13-18</sup> It may be helpful to create a graphic of your process map on poster-sized paper to review with residents, nurses, and ancillary staff, and then revise it based on their feedback. Your map will:

- List all people involved in a patient's discharge.
- Show how it works on weekends and after hours.
- Reveal how it varies on different services and units.

Make sure that your map reflects the current reality of how the discharge process actually works, not how it is supposed to work. You should use an iterative group process to develop the process map, explore the pros and cons of all elements of your discharge process, and investigate what works, what does not, and how the process can be improved.

It is important to be sure your process map is clearly understood. An example of a clear format is the American Society of Mechanical Engineers'<sup>19</sup> mapping standard that is widely used in manufacturing and increasingly popular in office and service environments.

## Step 6: Revise Current Discharge Workflow To Eliminate Duplication

The RED is not an add-on to your current discharge process. It is a new way of discharging patients that requires you to stop discharging patients the old way. Use your process map to identify elements that are duplicative with RED processes early in your planning. To eliminate redundancy:

- Compare the elements of the RED to the elements of your current discharge process to identify areas of overlap and eliminate the elements of the old process that duplicate the RED process.
- Identify regulatory items (e.g., Joint Commission requirements) that you currently include in your discharge process that are not included in the RED and integrate them into the new RED processes.

It will be necessary to bring together nurses, case managers, social workers, and hospital administrators who know the regulatory requirements. This group can start by creating a spreadsheet of RED processes, current discharge processes, and regulatory requirements. It may be necessary to

work with the legal department and medical records department or the committees responsible for modifying the official hospital medical record. Then the group will develop a plan to eliminate the old discharge process, while ensuring the RED process includes all necessary regulatory elements.

## **Step 7: Assign Responsibility for RED Components**

You will need to think about how to integrate the RED's components into current processes. In the clinical studies of the RED at Boston University Medical Center, the RED components, except the followup phone call that was conducted by a pharmacist, were all done by the same person, called a "*discharge educator*" or "DE." The DE was a registered nurse hired specifically to implement the RED. You will have to make several decisions regarding staffing the RED.

### **Should You Hire a New Staff Person?**

There are advantages to hiring personnel whose sole job is to prepare patients for discharge. It ensures that RED responsibilities will not be neglected in the face of competing demands and that other important hospital work will not be given short shrift to make time for RED activities. This, however, requires the hospital to find funding for these positions. Furthermore, you will need to pay close attention to how these new staff members are integrated into the hospital.

If you choose to hire new staff, you will need to decide what qualifications those individuals should have. Some RED components require a clinical background, which suggests hiring a nurse, pharmacist, physician's assistant, or other clinician. On the other hand, some RED components require organizational skills that might be better suited to those with a social work background.

### **Should You Use Existing Staff?**

Several hospitals have implemented the RED without hiring new staff. A variety of hospital staff could perform the RED, but there are pros and cons to each choice.

- The staff nurse caring for the patient being discharged

**Pros:** Has clinical expertise, knows the patient and the care plan, may already be responsible for aspects of medicine reconciliation, and often can efficiently organize the discharge plan.

**Cons:** Is busy with routine patient care duties and responsibilities. Modification to current responsibilities is required. Furthermore, many nurses work a 3-day week, which requires systems to be set up to ensure smooth handoffs.

- Case managers or nurses from the patient's health plan or insurers

**Pros:** Reduces work burden to existing staff and hospital does not have to pay.

**Cons:** Hospital has no control over external staff and cannot ensure that work gets performed. Coordination may be difficult, requiring a clear delineation of responsibilities and communication protocols. Discharge summary and the discharge plan would have to be transmitted in real time.

- Discharge planners or social work staff

**Pros:** Skilled in coordinating postdischarge services.

**Cons:** Lack clinical skills that are necessary for some components.

- The resident house staff (if you are in a teaching hospital)

**Pros:** Has clinical expertise, knows the patient and the care plan, and often can efficiently organize the discharge plan. Educates new doctors on safe, effective discharge processes.

**Cons:** Turnover requires continual retraining and oversight. Not available in nonteaching hospitals.

- Pharmacist

**Pros:** Has clinical expertise. Evidence base for the RED process is based on a clinical pharmacist (PharmD) conducting postdischarge followup call.

**Cons:** Is busy with pharmacy responsibilities. Modification to current responsibilities is required.

### **Should One Person Deliver All RED Components?**

These duties, however, do not all have to be performed by the same person. It is possible to have one person perform some of the RED components, supplementing with additional staff for other components. For example, social workers could schedule followup appointments, organize postdischarge appointments and equipment, and engage social supports, while medically trained personnel conduct more clinical tasks, such as medication reconciliation and teaching how to take medicines and recognize side effects. Responsibilities can be split whether you are hiring new staff or using existing staff.

Ultimately, the staff you choose will depend on the number of patients you target, the willingness of current staff to provide a new service, the details of the business case between your hospitals and insurers, and the return on investment that you anticipate from implementing the RED. No matter which strategy you choose, staff must be provided with adequate time to carry out these new activities and there must be good communication among staff members.

Completing Table 1 on the next page will assist you in thinking about how each component will be addressed.

**Table 1. RED Staff Assignment Planning Chart**

<b>RED Component</b>	<b>Person Responsible</b>
1. Ascertain need for and obtain language assistance.	
2. Make appointments for followup care (e.g., medical appointments and postdischarge tests/labs).	
3. Plan for the followup of results from lab tests or labs that are pending at discharge.	
4. Organize postdischarge outpatient services and medical equipment.	
5. Identify the correct medicines and a plan for the patient to obtain them.	
6. Reconcile the discharge plan with national guidelines.	
7. Teach a written discharge plan the patient can understand.	
8. Educate the patient about his or her diagnosis and medicines.	
9. Review with the patient what to do if a problem arises.	
10. Assess the degree of the patient's understanding of the discharge plan.	
11. Expedite transmission of the discharge summary to clinicians accepting care of the patient.	
12. Provide telephone reinforcement of the discharge plan.	

### **Step 8: Train Discharge Educators and Followup Telephone Callers**

There are several options for providing training to your DEs and callers:

- Read this toolkit. The DEs and their supervisors could read this toolkit and review its contents in a group session.
- Train-the-trainer. Training could be accomplished either as a series of inservice sessions or using the “train-the-trainer” technique where a set of key nurses (perhaps one or two from each unit or a “master trainer”) could be trained at another hospital already using the RED.
- A 1-day training course. An example of an agenda for a 1-day training that would take place at your hospital is at the end of this tool. This course is organized so that the first 2 hours

are for senior leaders and the implementation team, and the remainder of the day is for the implementation team only. The course includes various role plays and interactive exercises to help the hospital identify how it will carry out each of the key functions.

- **Online training.** The Project RED Training Program is available on the Agency for Healthcare Research and Quality’s Web site at: [www.ahrq.gov/professionals/systems/hospital/red](http://www.ahrq.gov/professionals/systems/hospital/red). You may also want to use resources that are related to delivering the RED, such as the Health Literacy Universal Precautions Toolkit, available at: [www.ahrq.gov/professionals/quality-patient-safety/quality-resources/health-literacy-measurement/healthliteracytoolkit.pdf](http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/health-literacy-measurement/healthliteracytoolkit.pdf).

In addition to training on the RED, effective DEs and callers should be trained on health literacy communication strategies, teamwork, cultural competence, use of interpretation services, and adult learning theory.

## **Step 9: Decide How To Generate the “After Hospital Care Plan”**

The “After Hospital Care Plan” (AHCP) is an essential component of the RED. It is a booklet that presents information for patients that they will need once they leave the hospital. It was designed with the assistance of graphic design and health literacy consultants so that the information is presented in a clear and understandable format, using large fonts, colors, and icons. The AHCP is described in detail in Tool 3, “How To Deliver the Re-Engineered Discharge at Your Hospital.” The AHCP can be created in one of several ways:

- **Use a word processing program to manually create the AHCP.** This involves using word processing software with a template. This method requires little training and allows the most flexibility in creating an AHCP tailored specifically to each patient. Free text can be added with directions that are specific to that patient. While simple, this method is the most time consuming. Clinical information such as medicines and appointments must be entered manually, which creates an opportunity to introduce errors. We recommend that manually produced AHCPs be thoroughly reviewed twice for correctness before they are taught to patients. You can find a Word template of the AHCP in English and Spanish at [www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/).
- **Use self-standing RED Workstation to create the AHCP.** Data for the AHCP are entered into a commercially available self-standing Workstation that creates the AHCP. The software for the Workstation uses drop-down menus to enter key discharge information, saving time and improving accuracy. The formatted AHCP can be reviewed on a computer screen and then printed. The software program formats all the data fields of the AHCP, reduces transcription errors, and saves time.
- **Integrate AHCP production into health information systems.** Populating the AHCP with data already in the hospital’s information system improves accuracy and efficiency. This can be done either by importing hospital data into the RED Workstation or by having your IT department program software to create the AHCP directly from the information system. Implementing either option is time consuming and requires hospital leadership to prioritize the RED program over other IT projects. Once implemented, however, this method of producing



the AHCP is the most efficient and accurate.

## **Step 10: Provide the RED for Diverse Populations**

Even in the absence of language barriers, disparities in health care and outcomes linger among racial and ethnic groups in the United States. Providing discharge education to patients with limited English proficiency, limited health literacy, or non-Western health beliefs and practices presents unique challenges. Tool 4, “How To Deliver the Re-Engineered Discharge to Diverse Populations,” provides guidance on working effectively with culturally and linguistically diverse patients. Your hospital, however, will need to adapt the RED to meet the needs of the populations that you serve.

## **Step 11: Plan To Measure the Progress of RED Implementation**

Monitoring the implementation and impact of your readmission reduction efforts is essential. Tracking process and outcome data will provide information that can be shared with staff as part of continuous quality improvement efforts and will satisfy stakeholders that progress is being made. Most measurements can be reported on a monthly basis. Information about how to track your implementation efforts and outcomes is discussed in the RED tool called “How To Monitor RED Implementation and Outcomes.”

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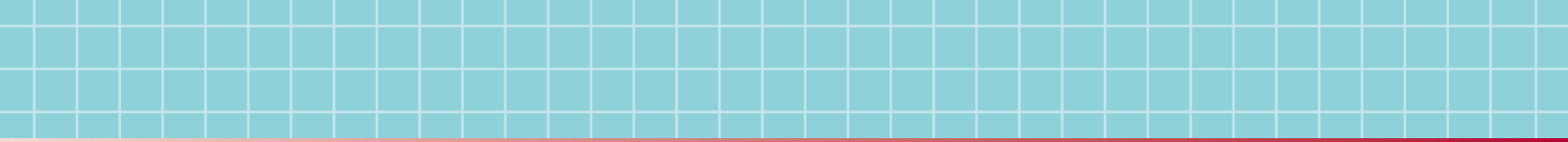
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## Sample Training Agenda

Some hospitals might benefit from onsite training about how to carry out the RED. A sample agenda for a daylong training is shown below.

Time	Title of Session	Presenter
9:00 – 9:05	Introductions	
9:05 – 10:20	Background of the RED	
	Objectives: <ul style="list-style-type: none"> <li>• Introduce the patient safety and public policy issues</li> <li>• Review the scientific evidence from Project RED research</li> <li>• Describe factors related to the “business case” for hospitals</li> <li>• Discuss the important role of the senior leaders</li> </ul>	
10:20 – 10:30	Break	
10:30 – 12:15	Discharge Educator Training	
	Objectives: <ul style="list-style-type: none"> <li>• Understand the components of the RED</li> <li>• Understand the discharge educator role</li> <li>• Review the implementation tools</li> <li>• Review specific culturally appropriate actions for RED components</li> </ul>	
12:15 – 1:00	LUNCH	
1:00 – 2:30	How Will Your Hospital Implement the RED?	
	Objectives: <ul style="list-style-type: none"> <li>• Discuss implementation and workflow plan</li> <li>• Review hospital’s challenges:               <ul style="list-style-type: none"> <li>– Hospital related</li> <li>– Patient related</li> <li>– Medical team related</li> </ul> </li> <li>• Develop strategies to overcome challenges</li> <li>• Review hospital’s next steps in implementing the RED</li> </ul>	
2:30 – 3:30	Workstation Training	
	Objectives: <ul style="list-style-type: none"> <li>• Understand the connection between the DE Workbook and the Workstation</li> <li>• Learn how to use the Workstation to document the discharge plan and to create the After Hospital Care Plan (AHCP)</li> </ul>	
3:30 – 3:45	Break	
3:45 – 4:30	Postdischarge Followup Phone Call	
	Objectives: <ul style="list-style-type: none"> <li>• Understand the importance of the followup phone call</li> <li>• Learn to conduct the preparation steps</li> <li>• Learn to conduct appropriate actions after the call</li> </ul>	
4:30 – 5:30	How To Measure RED Implementation and Outcomes	
	Objectives: <ul style="list-style-type: none"> <li>• Introduce measurable implementation and outcome indicators</li> <li>• Review specific measures for each RED component</li> <li>• Discuss goals and using measures to inform continued quality improvement</li> </ul>	



# Tool 3: How To Deliver the Re-Engineered Discharge at Your Hospital

## Purpose of This Tool

This tool is intended to be a resource for discharge educators (DEs). After providing an overview of the DE's responsibilities and the After Hospital Care Plan (AHCP), it describes in detail how to deliver each of the components of the Re-Engineered Discharge (RED). After studying the material, DEs should:

- Know the procedures for delivering each component of the RED (except the postdischarge followup phone call), including how to create and teach the AHCP.
- Possess communication and educational competencies required for an effective discharge. For additional techniques on delivering the RED to diverse populations, see Tool 4, “How To Deliver the Re-Engineered Discharge to Diverse Populations.”

## Role of the Discharge Educator

The goal of the DE is to educate and advocate for patients in order to best prepare them and their caregivers for discharge and success following discharge from the hospital. DEs are charged with making sure the elements of the RED are followed. The DE collaborates with the patients' multidisciplinary medical teams about what happens during the hospital stay and what needs to be done for a safe transition home.

The DE works with medical teams and other hospital staff (e.g., social worker, case manager, discharge planner) to:

- Review the discharge plan that has been developed by the medical team and identify service gaps.
- Address gaps by arranging for appropriate services (e.g., diabetic education, visiting nurse).
- Identify barriers to the discharge plan and strategies to overcome these barriers (e.g., transportation issues, cost of medicine, anticipated medicine side effects).
- Create the AHCP, an easy-to-understand discharge plan, and teach it in a way that enables patients to understand how to care for themselves once they go home.

In the clinical trial of RED, DEs were registered nurses hired specifically to perform DE functions. For the purposes of this tool, we will describe the RED process assuming that the DE will be responsible for all the components of the RED, except for the postdischarge followup phone call. (See Tool 5, “How To Conduct a Postdischarge Followup Phone Call.”) At your hospital, several staff members may perform RED responsibilities, and the DE may make the followup phone call. For a discussion of these options, see Step 7: Assign Responsibility for RED Components in Tool 2, “How To Begin the Re-Engineered Discharge Implementation at Your Hospital.”

In the clinical trial of the RED, the RED consisted of 11 mutually reinforcing components that are delivered throughout the hospitalization and shortly after discharge. However, only English-speaking patients participated in the trial. To serve diverse populations, including speakers of languages other than English, hospitals will have to provide language assistance. We have therefore added a component on language assistance to the RED. Table 1 below summarizes the 12 components of the RED and actions the DE takes to implement these components.

**Table 1. RED Components and Discharge Educator Responsibilities**

RED Component	DE Responsibilities
1. Ascertain need for and obtain language assistance.	<ul style="list-style-type: none"> <li>• Find out about preferred languages for oral communication, phone calls, and written materials.</li> <li>• Determine patient and caregivers' English proficiency.</li> <li>• Arrange for language assistance as needed, including translation of written materials.</li> </ul>
2. Make appointments for followup care (e.g., medical appointments and postdischarge tests/labs).	<ul style="list-style-type: none"> <li>• Determine primary care and specialty followup needs.</li> <li>• Find providers (if patient does not have) based on patient preferences: gender, location, specialty, health plan participation, etc.</li> <li>• Determine need for scheduling future tests.</li> <li>• Make appointments with input from the patient regarding the best time and date for the appointments.</li> <li>• Instruct patient in any preparation required for future tests and confirm understanding.</li> <li>• Discuss importance of clinician appointments and tests/labs.</li> <li>• Inquire about traditional healers and ensure that traditional healing and conventional medicine are complementary.</li> <li>• Confirm that the patient knows where to go and has a plan about how to get to appointments; review transportation options and address other barriers to keeping appointments (e.g., lack of daycare for children).</li> </ul>
3. Plan for the followup of results from tests or labs that are pending at discharge.	<ul style="list-style-type: none"> <li>• Identify tests and lab work with pending results.</li> <li>• Discuss who will review the results and when and how the patient will receive this information.</li> </ul>
4. Organize postdischarge outpatient services and medical equipment.	<ul style="list-style-type: none"> <li>• Collaborate with the case manager to ensure that durable medical equipment is obtained.</li> <li>• Document all contact information for medical equipment companies and at-home services in the after hospital discharge plan (AHCP).</li> <li>• Assess social support available at home.</li> <li>• Collaborate with the medical team and case managers to arrange necessary at-home services.</li> </ul>

*continued*

**Table 1. RED Components and Discharge Educator Responsibilities (continued)**

RED Component	DE Responsibilities
5. Identify the correct medicines and a plan for the patient to obtain them.	<ul style="list-style-type: none"> <li>• Review all medicine lists with the patient, including, when possible, the inpatient medicine list, the outpatient medicine list, and the outpatient pharmacy list, as well as what the patient reports taking.</li> <li>• Ascertain what vitamins, herbal medicines, or other dietary supplements the patient takes.</li> <li>• Ensure a realistic plan for obtaining medicines is in place.</li> </ul>
6. Reconcile the discharge plan with national guidelines.	<ul style="list-style-type: none"> <li>• Compare the treatment plan with National Guideline Clearinghouse recommendations for patient’s diagnosis and alert the medical team of discrepancies.</li> </ul>
7. Teach a written discharge plan the patient can understand.	<ul style="list-style-type: none"> <li>• Research the patient’s medical history and current condition.</li> <li>• Communicate with the inpatient team regarding ongoing plans for discharge.</li> <li>• Create an AHCP, the easy-to-understand discharge plan sent home with the patient.</li> <li>• Review and orient the patient, family, and caregiver to all aspects of the AHCP.</li> <li>• Encourage questions.</li> </ul>
8. Educate the patient about his or her diagnosis and medicines.	<ul style="list-style-type: none"> <li>• Provide education on primary diagnosis and comorbidities.</li> <li>• Explain what medicines to take, emphasizing any changes in the regimen.</li> <li>• Review each medicine’s purpose and how to take each medicine correctly, and note important side effects.</li> <li>• Assess patient’s concerns about the medicine plan.</li> </ul>
9. Review with the patient what to do if a problem arises.	<ul style="list-style-type: none"> <li>• Instruct on a specific plan of how to contact providers by providing contact numbers, including evenings and weekends.</li> <li>• Instruct on what constitutes an emergency and what to do in cases of emergency and nonemergency situations.</li> </ul>
10. Assess the degree of the patient’s understanding of the discharge plan.	<ul style="list-style-type: none"> <li>• Ask patients to explain in their own words the details of the plan. Continue instruction until patients correctly teach-back the plan.</li> <li>• Contact family members and other caregivers who will share in the caregiving responsibilities if necessary.</li> </ul>
11. Expedite transmission of the discharge summary to clinicians accepting care of the patient.	<ul style="list-style-type: none"> <li>• Deliver discharge summary and AHCP to clinicians accepting care of patient (including visiting nurses) within 24 hours of discharge.</li> </ul>
12. Provide telephone reinforcement of the discharge plan.	<ul style="list-style-type: none"> <li>• Call the patient within 3 days of discharge to reinforce the discharge plan and help with problem solving.</li> <li>• Staff DE help line. Answer phone calls from patients, family, and other caregivers with questions about the AHCP, hospitalization, and followup plan in order to help patient transition from hospital care to outpatient care setting.</li> </ul>

## The After Hospital Care Plan

One of the principles of the RED is that all patients should leave the hospital with an easy-to-understand *discharge plan*. The discharge plan is a planned course of treatment to be given to the patient and used by the patient after leaving the hospital. The discharge plan is distinct from the *discharge summary*, which is a summary of the medical aspects of the hospital stay, intended for the medical providers.

We call the discharge plan the AHCP, because the patients are often not familiar with the word “discharge.” The AHCP is a booklet that presents the information patients need to prepare for the days between discharge and the first visit with the clinician in charge of the patient’s outpatient care. While this will frequently be the patient’s primary care provider (PCP), sometimes specialists serve this role. In this toolkit we use the term PCP to refer to the clinician who has main responsibility for the patient.

The AHCP is designed to be easily understood, even for patients or caregivers with limited health literacy. The AHCP is finalized, printed, and used as a teaching aid by the DE in teaching patients what they need to know in order to take care of themselves when they go home from the hospital. The DE reviews each part of the AHCP with patients and confirms that they understand what to do when they go home.

The AHCP may be bound with a spiral plastic binder. Patients can be given a magnet with your hospital logo so that they can take it home and hang it on the refrigerator. Then they can open to the color-coded calendar of the next 30 days of events or whatever page is most important to them.

### What Are the Components of the After Hospital Care Plan?

The components of the AHCP are:

- A personalized cover page with the patient’s name, date of discharge, name of hospital, and name and phone numbers of the people to contact with questions: PCP, DE, outpatient case manager, etc.
- Updated list of all medicines with appropriate dose and dosing schedule information.
- A list of medicine allergies.
- A list of upcoming appointments with clinicians, including visiting nurses, tests, etc., for the next 30 days. This includes location of appointments and numbers to call if the patient needs to reschedule.
- A 30-day calendar that is color coordinated to the appointments. The calendar also indicates what day to expect a followup phone call, and observed cultural and religious holidays to trigger the DE and the patient to consider upcoming events that may affect the keeping of appointments.
- A diagnosis information page.
- A patient activation page for the patient to record questions, concerns, and symptoms to be discussed at the followup clinician appointment.
- A list of outstanding test results (when applicable).



- A list of durable medical equipment the patient has or needs to obtain or have delivered to his or her home (when applicable). This includes contact information of the company providing equipment, when it will be delivered, and whom to call if the equipment is not delivered or if there are malfunctions.
- The patient’s advanced directives for his or her end-of-life care.
- Recommendations for diet modifications (when applicable).
- Recommendations for exercise or physical activity limitations (when applicable).

At the end of this tool is an annotated example of an AHCP.

## What Is the Patient Information Workbook and the RED Workstation?

The RED patient information Workbook is available online ([www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/)). It guides the DE step by step to ensure the collection of all the information that is needed to produce an AHCP and complete a RED discharge.

The RED Workstation is a software program that allows the DE to enter all the information that has been collected in the Workbook. You can also upload photographs of the patient’s DE and PCP (if you have one) to print on the front cover of the AHCP. Using the Workbook, the DE can enter the RED components into the Workstation as the DE gathers information throughout the patient’s hospitalization (e.g., appointments, medicines, diagnosis).

Some of the information can be imported into the Workstation directly from the electronic health record (EHR), therefore eliminating some of the manual entry. Once the information is entered, it is designed to automatically print a personalized AHCP. If your hospital is not using the Workstation, the DE may use the Workbook to generate an AHCP using a template.

A template for creating the AHCP for English-speaking patients and a template for Spanish-speaking patients are both available online ([www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/)). Tool 2, “How To Begin the Re-Engineered Discharge Implementation at Your Hospital,” reviews the options for generating the AHCP.

If you are unable to generate an AHCP for any period of time, your patients can collect this information themselves using the guide *Taking Care of Myself: A Plan for When I Leave the Hospital*. The guide is available online at [www.ahrq.gov/patients-consumers/diagnosis-treatment/hospitals-clinics/goinghome/index.html](http://www.ahrq.gov/patients-consumers/diagnosis-treatment/hospitals-clinics/goinghome/index.html).

## Steps To Deliver the In-Hospital RED Components

The following sections provide step-by-step guidance for the DE describing how to perform the RED. For the remainder of this tool, we address the DE directly. There are also examples and tips on how to retrieve, document, and teach the RED components.

### Obtain and Review Patient Information From Medical Records

Before the first meeting with your patient, be sure to read the medical record to familiarize yourself with the events leading up to the admission, the treatment delivered in the hospital so far, and the

treatment plan. This information is generally in the admission history and physical section of the chart, in the daily progress notes, and in any consultation notes. This information includes:

- Patient's age, birth date, sex, inpatient doctor's name, and admission date.
- Patient's language preferences for oral communication, phone calls, and written materials and need for an interpreter and translated materials.
- Patient's self-described cultural/racial/ethnic background.
- Diagnoses (admitting diagnosis and comorbidities) and functional status.
- Medicine list (including herbal or natural supplements and other traditional medicine).
- Medicine allergies.
- Sensory deficits.
- Any equipment used or needed at home.
- Test results and completed tests with pending results.
- Advanced directives or health proxy.
- Medical team's discharge plan.

Unless your RED Workstation is programmed to enter this information automatically, enter information into the RED Workbook. For example, diagnosis information is recorded in the Workbook, including:

- Admitting diagnosis: (e.g., chest pain).
- Comorbidities: (e.g., high blood pressure, high cholesterol).
- Discharge diagnoses: (e.g., chest pain, hypertension, hypercholesterolemia).

## **Confer With the In-Hospital Medical Team**

Before meeting with your patient, be sure to contact the in-hospital medical team with whom you will collaborate throughout the patient's hospital stay. Be sure the team knows your role and keep them informed of your work with the patient. Do not hesitate to ask questions. The following is a list of items to cover with the medical team:

- What is the best way to communicate with the medical team (e.g., pager, email, telephone)?
- When is the best time to check in each day?
- Can you confirm the diagnosis(es)?
- Is the patient aware of his or her diagnosis?
- Is it o.k. to discuss the diagnosis, daily plan, discharge plan, and appointments needed directly with the patient?
- Can you confirm the medicine list for discharge and communicate discrepancies found?
- Are there any difficulties communicating with the patient, family members, or caregivers?
- When is the expected date of discharge?
- Are there any concerns about discharge?

## Arrange To Meet With Patient, Family, and Other Caregivers

Meet with the patient as soon as possible (within 24 hours) after admission. This will maximize teaching time while the patient is in the hospital. Discussion with family members and other caregivers is also important to a successful transition. More detail about working with families is found in Tool 4, “How To Deliver the RED to Diverse Populations at Your Hospital.”

Whenever possible, arrange for caregivers to be present when meeting with the patient or arrange to meet with them separately. It is important to set expectations with patients and their caregivers, to show them that in fact their questions will be answered and that you will take the time to make sure they understand everything they need to know.

If the patient cannot communicate or is not mentally competent to make decisions, you will need to work with the patient’s legal proxy. A legal proxy, who may or may not be a caregiver, is the person with legal authority to act on the patient’s behalf.

## First Meeting With the Patient

Throughout the hospital stay, you will educate patients using the components of the RED listed above. Studies indicate that patients have difficulty understanding health information that is only communicated verbally. People generally understand and retain less than 50 percent of information discussed, and communication is even more challenging in the hospital setting where patients are sick, stressed, tired, and often medicated. You can increase the chances that patients will understand and retain what you teach them by using the following communication strategies. More information can be found in Tool 4, “How To Deliver the RED to Diverse Populations at Your Hospital.”

During the first meeting with the patient, you will introduce the RED and the role of the DE. If language preferences and interpreter needs have been established upon admission, assign the patient to a certified bilingual DE, or arrange for interpreter services for all meetings with the patient. Tips for the first meeting include the following:

- Ask permission to enter the patient’s room.
- Introduce yourself by name and identify your role.
- Determine if the patient feels well enough to participate.
- Ask the patient how he or she prefers to be addressed.
- If not already established, ask about language preferences for oral communication, phone communication, and written materials.
- Assess and meet patient’s language assistance needs. If the patient is not proficient in English, and you are not certified bilingual in the patient’s preferred language for oral communication, obtain interpreter services. Patients can be ashamed that they do not speak English very well and may claim to understand and say they do not need interpreter services even when they do not understand. Other times patients say that a friend or relative can interpret for them. Let the patient know that it is the hospital’s policy to always use a qualified medical interpreter. Do not continue until an interpreter arrives or is connected by telephone.
- Assess and meet language assistance needs of the patient’s caregivers. Even if the patient is proficient in English, the patient’s caregivers may not be. Caregivers’ understanding of the discharge plan will be critical to a safe transition home.

More information on language assistance can be found in Tool 4, “How To Deliver the RED to Diverse Populations at Your Hospital.”

Some tips for effective communication strategies that you can use when you meet with your patients include the following:

- Be attuned to body language. When possible, it is advisable to sit.
- Offer encouragement: “You did the right thing by coming to the hospital.”
- Express empathy: “It sounds like you’ve been through a lot.”
- Build self-confidence: “With practice you will be able to check your sugar levels.”
- Speak slowly.
- Use plain, nonmedical language.
- Listen actively; do not interrupt.
- Do not overload the patient with lots of information all at once; do not cover more than three key points at a time.

### **Orient the Patient to the RED**

It is helpful that the patient and involved caregivers understand your role as the DE and how you will help the patient make a safe and smooth transition from hospital to home. Recognizing the benefits of having a DE will help fully engage the patient and the caregiver in the RED process. When describing the RED and the role of the DE, be sure to emphasize the following points:

- A safe and well-planned discharge from the hospital reduces the risk of unnecessarily returning to the hospital.
- Often there is a lot of new information to learn and remember before leaving the hospital and many patients find this to be challenging.
- The DE will help you learn the essential new information you will need to make a safe transition from hospital to home.
- The AHCP and discharge summary will be sent to your primary care provider to help ensure the smooth transfer of care from the hospital doctors to your primary care provider.
- Your DE will teach you the important things you need to know about your illness, your medicines, and your followup appointments and what to do if you run into problems after returning home.
- Your DE will help answer your questions.

### **Gather Information From the Patient**

Once the patient understands your role as the DE, continue engaging the patient in discussion that will help you to gather and confirm essential details needed to construct the AHCP. The essential information to gather from the patient includes:

- PCP's name and office location.
- Patient's understanding of illness and treatment.
- Medicines taken at home prior to admission.
- Patient contact information and preferences for followup phone call. (Blank contact sheets are available online at [www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/).)
- Names and contact information for the health proxy, caregivers, and social support persons. (Refer to contact sheet.)
- Pharmacy name and location.
- Medicine allergies.
- Advanced directives and health care proxy.
- Durable equipment he or she has/should have at home.

Record this information in the Workbook. A Word template of the RED Discharge Preparation Workbook is available online at [www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/).

Patients who have not assigned a health care proxy or established advanced directives may need additional support to understand why this is useful and how to do this.

You will also want to verify and supplement information collected from the medical record. For example, be sure to discuss diagnosis and other comorbidities with the patient, as there may be additional information to gather from the patient not yet captured in his or her medical record that will be very helpful in preparing the patient for discharge. **Often patients who are readmitted to the hospital within 30 days of discharge are readmitted for a comorbid condition rather than their original principal diagnosis.** If, for example, a patient admitted for chest pain also has hypertension, education about the proper monitoring of hypertension may potentially avoid rehospitalization.

## Engage in Daily Interactions With the Patient

The goal of the followup patient sessions is to *teach and reinforce* important health and treatment plan information. It also is to identify and address discrepancies between the medical team's discharge plan and the patient's understanding of the discharge plan, as well as barriers to patient understanding. Following the initial meeting, you will make a plan with the patient to return to teach elements of the RED and address any new concerns. Encourage patients to identify someone who can support them during their transition to include in the conversations.

You will not always have the opportunity to teach and reinforce ALL identified elements for each patient. This will often be due to short hospital stays. You will need to assess and prioritize what you will cover based on factors such as:

- Patient's needs, requests, and receptiveness.
- Gaps in the discharge plan.
- Patient's involvement in community services.

- New problems/diagnoses versus old.
- Which parts of the education can be done safely after discharge.

The postdischarge telephone call can be used to deal with the elements that were not fully covered by the time of discharge. It is important to assess whether the patient or caregivers will want interpreter services for phone calls. Do not assume that because people can speak in English without an interpreter at the hospital they will be able to comfortably complete the phone call in English. A telephone presents another hurdle, as it removes context, body language, and lip movement.

## **Make Appointments for Followup and Postdischarge Tests/Labs**

Arranging for a postdischarge appointment to follow up on ongoing medical issues is one of the most important components of the RED. The postdischarge appointments include not only clinicians (primary care clinician, specialists, etc.), but also appointments for tests that have been scheduled for after discharge, dates that the visiting nurse will visit the home, day and time of medical equipment delivery, date and times to go to the anticoagulation clinic, etc. All this information is entered into the Workbook and will be printed on the AHCP's appointments page and also on the 30-day calendar. The next section discusses important concepts related to making appointments that are convenient for patients.

## **Determine Best Times for Appointments and Make Appointments**

Before making any appointments, it is helpful to determine which days and times are most convenient for the patient and whoever might be assisting with transportation.

Ask the patient about:

- Whether any friends or family members will be involved in the appointment or transportation.
- Days or times when appointments should not be booked, including cultural or religious holidays the patient observes.
- Days and times that are particularly good.
- Any potential problems keeping appointments.
- Transportation options.
- Whether an interpreter will be needed. (For more information, see Tool 4, "How To Deliver the Re-Engineered Discharge to Diverse Populations.")

You may say something like:

"I will do my best to make your appointments according to the schedule that we discussed. I'll be back to make sure they will work for you and if not, I'll change them. I'll also make sure you know how to get to them."

If the AHCP is printed using the RED Workstation, then the 30-day calendar automatically lists national and religious holidays or observances. Appointments should be made to avoid these conflicts. Also ensure that there are no conflicts among multiple appointments. After making

appointments, verify that your patient, and whoever else will attend the appointment, can make them. Reschedule appointments if it turns out there is a conflict or difficulty obtaining transportation. Confirm that the patient knows how to reschedule if a conflict arises.

Use the information gathered above to complete the corresponding Workbook sections, adding information about appointments as they are made. Once an appointment has been made with the patient's PCP, document:

- PCP name.
- Day, date, and time of appointment.
- Name of clinician to see at appointment (if not PCP).
- Address/floor.
- Phone number.
- Fax number.

Also document whether the patient has a transportation plan to get to the PCP appointment, and if not, what transportation options were discussed

For appointments with visiting nurses or a physical, occupational, or speech therapist, include the following information to record postdischarge home services:

- Service (e.g., vital signs).
- Company name (e.g., Visiting Nurse Service of N.E.).
- Contact name.
- Address (e.g., patient's home).
- Phone.
- Date scheduled.

Your patient may need to see a specialist or may have outstanding lab or other tests that need to be completed after discharge. Schedule the appointment and teach the patient or a caregiver the importance of keeping the appointment. Document the following information in the Workbook:

- Day, date, and time of appointment.
- Provider name and location.
- Phone and fax numbers.
- Reason for specialist/test/lab (e.g., arthritis, heart condition).
- How the patient will get to the appointment.

## What If the Patient Does Not Have a Primary Care Provider?

If the patient does not have a clinician who takes responsibility for the patient's care (i.e., a PCP), check with the medical team or with hospital administration to learn how new PCPs are assigned at your hospital. Typically, PCP assignment does not require a referral. If your hospital does not have associated community health centers (CHCs), you should attempt to develop relationships with the CHCs and established private practices in the area.

With some insurance programs, however, the patient may have been assigned a PCP without the patient's knowledge, so it is worthwhile to call the insurer to check. Attempt to find a PCP for the patient based on the patient's preferences, where the patient lives, and his or her payment source (i.e., make sure the PCP accepts the patient's form of insurance or will treat uninsured patients). Ask the patient if he or she has any preferences such as gender or language the PCP speaks. Once a PCP is located, make a followup appointment (preferably in the first week and no later than 2 weeks after discharge) to aid in a safe transition to the ambulatory setting.

The CHC associated with a hospital with a large uninsured population had a 2-month waiting list for a PCP appointment. The hospital made an agreement with an outside CHC to reserve two appointments per week for postdischarge followup.

## Follow Up on Test or Lab Results That Are Pending at Discharge

An important component of the RED is to ensure good followup for tests done in the hospital with results pending at discharge. These pending test results are frequently not followed up, and many of these test results require action.

Find out about pending tests by reviewing the patient's medical chart, checking the hospital laboratory reporting system, and speaking with the medical team. When the information is identified, it can be recorded in the RED Workbook, including the following information:

- Labs/tests pending (e.g., an examination of tissue from your stomach to look for *H. pylori*, a bacteria that can bother your stomach).
- Date conducted.
- Date results expected.
- Who will follow up on the results and when (e.g., Dr. Avery, appointment on August 8).

At discharge, explain to the patient that some test results are still not ready. Point out where these tests are noted in the AHCP. Explain which test/lab results are still pending, who will review the results, and when and how the patient will receive this information. You can say something like this:

“Remember having [test/lab] done? You will be ready to leave the hospital before the results from [that/those tests/labs] will be back. We will put them on your AHCP to remind you to ask your doctor about the results when you see [him/her] on [date].”

## Organize Postdischarge Medical Equipment and At-Home Services

Many patients leaving the hospital require medical equipment and services to care for themselves at home. Coordination of equipment and at-home services is necessary to safely transition the patient home. The absence of these services can lead to a return to the ED or hospital.



Teach the patient and caregivers about any medical equipment that will be needed in the home after discharge. You will obtain this information by reviewing the patient's medical record and speaking with the medical team. For example, some patients will need oxygen delivered to the home. Examples of medical equipment are:

- Hospital bed.
- Portable toilet (commode).
- Mask and equipment to help sleep (CPAP).
- Wheelchair.
- Oxygen.
- Medicine sprayer (nebulizer).
- Tool to measure how deeply you breathe (peak flow meter).
- Tool to measure blood sugar (glucometer).
- Scale.

Enter into the Workbook the relevant information about each piece of equipment needed. This will be displayed in the medical equipment section of the AHCP.

- Whether the medical equipment has been ordered.
- Type.
- Company name.
- Contact.
- Address.
- Phone.
- Delivery date (if ordered).

When reviewing the AHCP, you can discuss the importance of each piece of equipment and how to use it. Whenever possible, use actual examples of the equipment, such as a peak flow meter or glucometer, for more effective demonstration of how to use the equipment. Have the patient show you how he or she will use the equipment at home.

## **Identify the Correct Medicines and a Plan for the Patient To Obtain Them**

Two of the most important components of the RED are to: (1) identify the correct medicines that the patient should take (and not take) after discharge, and (2) arrange for the patient to obtain the medicine.

The purpose of medicine reconciliation in preparation for hospital discharge is to determine that the patient's discharge medicine list and discharge summary medicine list reflect the most recent and accurate updates made to the patient's medicine plan. Although the Joint Commission requires medicine reconciliation, many hospitals find it challenging. If your hospital does not have an established medicine reconciliation process, it can use resources such as the MATCH Reconciliation

Toolkit (available at: [www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/match/index.html](http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/match/index.html)) to develop one. In the meantime, you will need to develop a single, accurate medicine list.

Some tips for discharge medicine reconciliation are:

- Obtain the current list of medicines from the outpatient medical record (when available), the inpatient chart, and in some cases, the patient’s local pharmacy records, to determine what medicines the patient has been taking. If no list is available, see if a family member can bring all the patient’s medicine containers to the hospital.
- Review the list when you first meet the patient to determine what he or she is taking. You might say:

“We want to make sure that when you leave the hospital, you have a list of all the medicines you should be taking. To do this, you and I will go over the list the hospital has. I’d like you to tell me whether you are currently taking these medicines, and if so how much you take.
- After reviewing all the medicines on the list with the patient, you might say:

“Now I’d like you to tell me if there are any other medicines you are taking that aren’t on this list. We may talk to your provider, and even talk to your pharmacy, so that we can make sure everyone has the correct list.”
- Ask if the patient uses or plans to use any other types of treatments along with the medicines, such as herbs, dietary supplements, or acupuncture. This can identify potential interactions with prescription medicines. If you are not sure about potential interaction risks, you can consult with a complementary and alternative medicine specialist or Web resources, such as the National Center for Complementary and Alternative Medicine at <http://nccam.nih.gov/>, for more information. More information can be found in “How To Deliver the RED to Diverse Populations at Your Hospital.”
- Discuss any discrepancies with the medical team and identify what medicines the patients should and should not be taking. Before discharge, resolve all discrepancies discovered in the medicine list.
- If your hospital inpatient unit has access to the outpatient EHR, update it with the current medicine list.
- Once it is finalized, attach the reconciled list of the medicines to the Workbook and enter it into the Workstation. This should be done as soon as possible because waiting until the day of discharge makes this process error prone.

### **Identify Problems the Patient Might Have Obtaining Medicine**

Explore if the patient might have any problems obtaining the medicines. The section of the Workbook that will help you identify this information includes the following:

- Patient plan to pick up medicines upon discharge: (e.g., wife will drive him to the pharmacy).
- Community pharmacy name.
- Phone number, street address, city.
- Whether the patient requested pill box and whether a pill box was given.

Engage in a dialogue with the patient that could include statements such as the following:

- “What pharmacy will you use to fill your prescriptions?”
- “How will you get to the pharmacy to pick up your medicine - by car, public transportation, or maybe a friend or family member?”
- “Is there anything that might make it difficult for you to pick up your medicines?”
- “Medicines can be expensive. Have you ever had any trouble paying for your medicines?”

If the patient identifies potential problems picking up medicines, then you can engage in a problem-solving conversation to assist in identifying a plan that will be successful. Sometimes it is necessary to discuss these issues with other family members and to elicit their support. For medicines for chronic conditions, explore mail delivery options. It will be helpful for you to have a resource list of pharmacies that will deliver medicines and medical supplies. If you cannot find a way to obtain prescriptions, collaborate with the case manager or social worker about how to obtain these medicines.

If the patient says he or she might have trouble paying for medicines, explore resources to help patients pay for their medicines. For information about overcoming financial barriers to obtaining medicines, see Tool 19 in the Health Literacy Universal Precautions Toolkit (available at: [www.ahrq.gov/professionals/quality-patient-safety/quality-resources/health-literacy-measurement/healthliteracytoolkit.pdf](http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/health-literacy-measurement/healthliteracytoolkit.pdf)).

### **Confirm Medicine Allergies**

All medicine allergies are confirmed with the patient, documented in the Workbook, and appear in the AHCP. In order to identify the allergy history accurately, review the patient’s medical record and inquire about any additional allergies that have not been documented. For example, you can say:

“Did you ever have a bad reaction after you took a medicine, such as an itchy rash or trouble breathing?”

If a patient is prescribed a medicine appearing on the allergy list, or a medicine in the same class, confirm the medical team’s awareness of the allergy. In most cases an alternative medicine should be prescribed. Document allergies in the appropriate section of the Workbook, and confirm that the patient knows what he or she is allergic to.

### **Reconcile the Discharge Plan With National Guidelines**

The purpose of the RED and the role of the DE are to teach the discharge plan that has been determined by the medical team. The hospital discharge, however, provides an important opportunity to be sure that the patient is on the optimal treatment plan. Many patients are discharged from U.S. hospitals on treatment regimens that do not follow national recommendations. Therefore, identifying and rectifying these inadequacies is an important component of the RED.

Once the discharge diagnoses are known, the treatment plan should be compared with any relevant national guidelines. We recommend that you refer to the National Guideline Clearinghouse at the Agency for Healthcare Research and Quality (AHRQ) Web site (available at: <http://guideline.gov/>) as an up-to-date source.

If there are potential discrepancies, you should check to see if the medical team knows of a clear reason for not following the guideline. For example, according to national guidelines patients with coronary artery disease should be on aspirin unless there is a clear documented contraindication. If such a patient is not on aspirin and there is no clear documentation for a contraindication for aspirin, it is important to contact the medical team to discuss potential modifications to the discharge plan. Either the treatment plan will need to be altered or appropriate documentation will be needed to record the contraindication. Remember, your patient will benefit from these “double checks.”

The discussion with the medical team can go something like this:

“When reviewing the AHRQ National Guideline Clearinghouse, I noticed that most patients with [specific diagnosis] are discharged on [medicine]. Is there a reason we shouldn’t add this to the treatment plan?”

## **Teach the Content of a Written Discharge Plan in a Way the Patient Can Understand**

Once you gather and enter all the information, first into the Workbook and then into the Workstation or Word template, you will print a final AHCP to give to your patient. If English is not the patient’s preferred language for written materials, use the Workstation’s capacity to print the AHCP in other languages. If you are not using the Workstation, or your Workstation cannot support the patient’s preferred language, arrange for the AHCP to be translated by a qualified translator. (See Tool 4, “How To Deliver the RED to Diverse Populations at Your Hospital.”)

Sit with the patient and carefully discuss each page of the AHCP. The following four sections give tips about how to teach the patient about the diagnosis, medicines, and appointments, and how to encourage question asking.

**IMPORTANT:** Please note that teaching the AHCP will happen throughout a patient’s admission, so much of the teaching on the day of discharge is reviewing information and assessing the patient’s understanding.

### **Teach About the Patient’s Diagnosis**

When the AHCP is printed, it will contain educational information about the primary diagnosis and other comorbidities. Whenever possible, provide patient education materials in the language the patient prefers for written materials. The DE should ask the medical team if the patient is aware of his or her diagnosis before discussing the diagnosis with the patient. Be careful of certain cultural contexts when educating the patient about diagnosis and treatment. (See Tool 4, “How To Deliver the RED to Diverse Populations at Your Hospital.”)

Patients may have beliefs about what their problem is, what caused it, and what treatment is needed. Before teaching about the person’s diagnosis or comorbidities, ask the patient about his or her health beliefs. The RED studies show that up to half of patients are not following their discharge plan 2 to 3 days after discharge. Up to one-third of these are patients who have decided that they are not going to take the medicines prescribed. Thus, exploring health beliefs can assist in treatment plan adherence.

An open-ended question that allows a more detailed response from the patient might be helpful. For example, you might ask:

“What do you think has caused this problem? What do you think will help you get better so that you don’t have to come back to the hospital?”

Begin teaching the patient about his or her diagnosis. For example, you might ask:

“The tests have helped the doctors find out what’s going on with your body. Would you like me to explain this to you?”

Once you have the patient’s permission to deliver information, you can say:

“The reason you have [symptoms/problem] is that [explain diagnosis in plain language]. This is called [medical diagnosis]. May I tell you more details about your medical problem?”

If yes, give the patient the RED illustrated diagnosis information sheet (see example in “Components of After Hospital Care Plan” at the end of this tool) describing his or her specific diagnosis and use it as a teaching guide. You can help the patient understand why the diagnosis information is important. A few tips include:

- “It can help you to better understand why it is important to take your medicine and keep your appointments.”
- “It allows you to talk with your family and friends, who might be able to help you if they have a better idea of your condition.”
- “It will help you make better decisions about your care.”

If the patient asks for clarification, explain again, using everyday, nonmedical language. You will also need to confirm comprehension (see the “Teach-Back” section below for tips). Once you are confident that the patient understands his or her diagnosis, you can move on to the next topic.

## **Teach About the Patient’s Medicines**

Bring the AHCP, which lists all the medicines, to the patient’s room for teaching. You will cover:

- Any changes to medicines (new medicines, change in dose or frequency, etc.).
- The correct dose.
- The time of day to take them.
- What to do if he or she misses a dose.
- The reason he or she is to take them.
- Which medicines to continue taking and which to stop taking.
- How long to take it (even if symptoms go away).
- Potential side effects.
- Not to discontinue without calling the doctor (when appropriate).
- The importance of bringing all medicines to followup appointments.

See the “Teach-Back” section below for tips on how to confirm comprehension.

## Teach About Appointments

After you have made the patient's followup appointments, review the details with the patient, including:

- Appointment date, time, and location.
- How the patient will get there; provide maps and directions if needed.
- The purpose of the appointment.

Remind your patient:

- If for any reason a conflict arises and he or she needs to change an appointment, to call the doctor's office to reschedule.
- That the contact information will be located in the AHCP.
- To bring the AHCP to all appointments.
- That someone from the RED team will call in approximately 48 hours to check in and go over the patient's medicines.

See the "Teach-Back" section below for tips on how to confirm comprehension.

## Encourage Questions

Patients can feel ashamed to ask questions and often are not even sure what questions they need to ask. Here are some tips for encouraging questions during your sessions with the patient:

- Do not appear to be in a hurry. Patients often do not ask questions because they think the hospital staff are too busy to take the time to answer questions.
- Communicate that you expect questions. For example, you could say, "That was a lot of information. I'm sure you must have questions."
- Listen and do not interrupt. Questions will often emerge if you let patients talk.
- Do not just ask, "Do you have any questions?" Patients often say no even if they do have questions.
- Invite family members and caregivers to ask questions.

Ask Me 3™ was developed to help promote effective communication between patients and providers in an effort to improve patient understanding. This technique can be helpful in teaching the AHCP. The program encourages patients to ask about three things before leaving the medical encounter:

1. What is my main problem?
2. What do I need to do?
3. Why is it important for me to do this?

More information is available at: [www.npsf.org/for-healthcare-professionals/programs/ask-me-3](http://www.npsf.org/for-healthcare-professionals/programs/ask-me-3).

The patient should also be encouraged to ask as many questions as he or she needs to in order to completely understand the AHCP. Questions Are the Answer is a campaign created by AHRQ to encourage patients to get more involved in their health care by customizing lists of questions

about starting new medicines, surgery, or medical tests. Building a list of personalized questions can empower patients to ask the questions that will elicit the information needed to make informed decisions. More information is available at: [www.ahrq.gov/patients-consumers/patient-involvement/ask-your-doctor/index.html](http://www.ahrq.gov/patients-consumers/patient-involvement/ask-your-doctor/index.html).

You also need to encourage your patients to ask questions of the providers they see after they leave the hospital. To address this need, the AHCP contains a page that helps guide the patient to prepare for his or her outpatient primary care appointment, and it encourages the patient to write down questions or concerns. The DE can review this page in the AHCP with the patient and describe its purpose and help the patient start to write his or her questions on this page. Family members can contribute to this page as well, as they too may have questions, concerns, or observations of their own.

## Assess the Degree of Patient Understanding

When asked, “Do you understand,” patients will frequently say, “Yes,” whether or not they understand. Therefore, an important component of the RED is to confirm that patients actually understand what they are supposed to do to take care of themselves once they go home. If they cannot understand, then someone needs to assist them at home or another plan needs to be implemented. To ascertain when a patient understands what you have taught, use the “teach-back” method, an evidence-based communication strategy described below.

### Teach-Back

One of the easiest ways to close the communication gap between patients and educators is to use the “teach-back” method. Teach-back is a way to confirm that you have explained to the patient what he or she needs to know in a manner that the patient understands. Patient understanding is confirmed when he or she explains the information back to you in his or her own words. Lack of understanding and errors can then be rectified with further directed teaching and reevaluation of comprehension.

A video demonstration of the teach-back method is available at: [www.nchealthliteracy.org/teachingaids.html](http://www.nchealthliteracy.org/teachingaids.html). Some points to keep in mind include:

- This is not a test of the patient’s knowledge; it is a test of how well you explained the concepts.
- Be sure to use this technique with **all** your patients, including those who you think understand as well as those you think are struggling with understanding.
- If your patient cannot remember or accurately repeat what you asked, clarify the information that you presented and allow the patient to teach back again. Do this until the patient is able to correctly describe your directions in his or her own words.

For example, you can use the teach-back method after teaching the patient about:

- The Diagnosis: “I want to make sure I explained things clearly. Please tell me how you would describe your illness.”
- The Medicines: “Medicines can be very complicated; I need to make sure I’ve explained everything. Please show me how you will take your [ask about a specific medicine] when you get home.”
- The Appointments: “O.k., tell me where and when your first doctor’s appointment will be.”

Remind patients that all the information they need to know is in the AHCP. This is not a memory test; they simply need to know where in the AHCP the information is located. After reviewing how to locate the information in the AHCP, ask a series of other questions. After several rounds of teach-back, if the patient still has trouble the medical team should be notified and an alternative plan should be created.

### **What If My Patient Cannot Understand the Discharge Plan?**

Patients who cannot demonstrate understanding of the discharge plan are likely to have difficulty once they go home. If your patient cannot demonstrate an adequate understanding of the discharge plan, then a new plan must be developed.

In some cases this will include being sure that your patient receives care and support from family, friends, or other caregivers once he or she returns home. In this situation, you can ask the patient if there is any person he or she would like to be informed of the discharge plan. When someone is identified, arrangements should be made to orient the caregiver to the AHCP. Have the caregiver present during teaching sessions and confirm the caregiver's understanding with teach-back.

In keeping with Health Insurance Portability and Accountability Act requirements, remember to obtain the patient's written permission to share health information with an identified caregiver and ascertain if the caregiver should receive the followup call in lieu of the patient.

At times, involving the family can lead to potential conflicts. If engaging the family has been difficult, or if the household is a source of conflict or stress, involving a social worker might be particularly important. Social workers can assist with assessment and potential intervention, in an effort to improve communication with and support for the family and to organize a safe discharge.

If a reliable caregiver is not identified, it may be appropriate to arrange for a visiting nurse service or a higher level of community care if necessary.

### **Review What To Do if a Problem Arises**

In the RED studies, we heard over and over from patients that what worried them most about leaving the hospital is that they would not be able to reach their doctor (or any other responsible clinician) if they had a problem. Therefore, an important component of the RED system is that each patient be told before discharge how to contact a medical provider if a problem arises after discharge.

You might try one of the following to initiate this dialogue:

- “Let’s talk about what to do if you think you’re feeling worse.”
- “How about if you think you’re having a side effect from a medicine?”
- “What should you do if you’re not sure you can get your medicine?”
- “I just want to make sure that you know what you should do if any of this happens.”
- “If your caregiver has concerns or questions, let’s make sure [he or she] knows how to reach us too if that’s ok.”



When raising this topic, you might engage in a dialogue with the patient such as:

“I’d like to talk about a few issues that might come up once you get home. I certainly hope that you will do well at home, but just in case there is a problem, here are some phone numbers where you can get help.”

Then show the front of the AHCP where the information on how to contact the PCP is listed and reinforce the importance of calling the PCP if problems arise. Also point out that the patient can call the DE with questions.

Review potential problems that may occur. Some areas to review with the patient include:

- New medicine side effects.
- Difficulty getting medicines.
- Worsening symptoms or loss of function.

Also make sure your patient knows what constitutes an emergency (e.g., sudden and severe pain, uncontrolled bleeding) and what should be done in case of an emergency (i.e., call 911; return to the hospital). Coach your patient on what might be normal difficulties associated with his or her condition (e.g., with congestive heart failure, shortness of breath when you exert yourself) versus a more acute situation (e.g., sudden, severe shortness of breath).

## Postdischarge Components of the RED

### Transmit the Discharge Summary to the Postdischarge Clinician

Another important component of the RED is to ensure that the clinical information from the hospitalization is transmitted to the clinician responsible for the patient’s care after discharge. When the clinical information is not properly transmitted, the “receiving clinician” is unaware of important clinical information and proper ongoing care of active medical issues is in jeopardy. This is a significant patient safety and clinical quality issue.

For these reasons, part of the RED is to transmit the patient’s hospital discharge summary and the AHCP to the PCP or the first clinician the patient will see, within 24 hours after discharge. This allows ample time for the clinician to review this information before the patient’s followup appointment. Furthermore, if a patient has a problem or question between the time he or she leaves the hospital and the day of the followup appointment, then the PCP will have the information about the hospitalization and can respond to questions or concerns.

This information is typically transmitted by fax or email, but any manner that is rapid and secure is acceptable. It is important to find out the preferences of the outpatient providers to determine the best mode of transmission.

One barrier to timely transmission of the discharge summary is that the discharge summary at many hospitals is not prepared until much later—in many cases, not until 30 days after discharge. If this is the case at your hospital, then it is very important to work with your hospital administration, nursing and medical leadership, and patient safety officer to implement policies to ensure that discharge summaries are completed in a timely way. In any case, be sure to transmit the AHCP within 24 hours of discharge.

## Provide Telephone Reinforcement of the Discharge Plan

The final component of the RED is to reinforce the AHCP by calling the patient at home in the 2 or 3 days after discharge. It is important to note that this call is not a “social call” but an action-oriented call designed to identify problems or misunderstandings that have developed after discharge and to organize a plan to address these issues. The options for who should carry out this task are described in Tool 2, “How To Begin the Re-Engineered Discharge Implementation at Your Hospital.” The content and procedures of the postdischarge telephone call are described in Tool 5, “How To Conduct a Postdischarge Followup Phone Call.”

## Staff a Discharge Educator Help Line

If several staff members fulfill the DE role, one central phone number should be given to patients to contact a DE. The DE can serve as a point of contact for the time between hospital discharge and the patient’s first ambulatory care appointment. Your hospital will decide if this line should be covered 5 or 7 days a week. When possible, calls should be returned within 24 hours. Keep a log of when calls were received and when they were returned, as well as the nature of the call and its resolution.

## Other Teaching Opportunities Included in the AHCP

The AHCP provides other opportunities to assist the patient before discharge. These are contained in the Workbook and are printed as part of the AHCP. In addition, frequently educational material is presented by other providers in the hospital that can be reinforced as part of the care transition process. The AHCP is printed with a pocket folder to include other educational materials or documents as needed. These items include:

- **Dietary advice:** Dietary advice can play an important role in preventing readmission. For example, diet can affect anticoagulation therapy, glucose control, and response to congestive heart failure treatment. Review the patient’s chart to determine if the patient has been placed on a special diet. Modified diets are frequently misunderstood by patients and their families. Review materials with patients and families and reinforce instructions using the teach-back method.
- **Activity level:** Is it important for the patient to start walking everyday? Is there a weight limit for carrying? Is there a driving restriction? Depending on the patient’s circumstances, it may be very important to reinforce the importance of activity instructions and limitations and to include reminders about this in the AHCP.
- **Self-care:** Patients frequently have questions about self-care activities (e.g., wound care) that will be needed. Simple illustrations may be particularly useful.
- **Substance abuse and smoking cessation:** When addictions are identified, you can address whether the patient is interested in intervention or referral for treatment. These details may be added to the AHCP. The online Word Template of the Workbook ([www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/)) has places to enter the patient’s stage of change (i.e., precontemplation, contemplation, preparation, action, or maintenance and relapse prevention), what the patient reports about his or her substance use, and what current treatment the patient is receiving or whether he or she is interested in treatment information.

Document these additional teaching opportunities in the Workbook, and note the date when you complete teaching about them.

# Components of After Hospital Care Plan (AHCP)

## AHCP Example: Cover Page

**Bring This Plan to ALL Appointments**

**After Hospital Care Plan for:**

**Oscar Sanchez**

**Discharge Date: August 1, 2012**

TRY TO QUIT SMOKING: Call Jon Doe at (xxx) xxx-xxxx at ABC Medical Center.


Question or Problem with this Packet? Call your Discharge Educator: (xxx) xxx-xxxx

Serious health problem? Call Dr. Mark Avery: (xxx) xxx-xxxx

**Personalized:**

- Name
- Date
- Phone numbers

## AHCP Example: Medicine Schedule

What time of day do I take this medicine?	Why am I taking this medicine?	Medicine name Amount	How many (or how much) do I take?	How do I take this medicine?
 Morning	Blood pressure	PROCARDIA XL NIFEDIPINE 90 mg	1 pill	By mouth
	Blood pressure	HYDROCHLOROTHIAZIDE 25 mg	1 pill	By mouth
	Blood pressure	CLONIDINE HCl 0.1 mg	3 pills	By mouth
	Cholesterol	LIPITOR ATORVASTATIN CALCIUM 20 mg	1 pill	By mouth
	Stomach	PROTONIX PANTOPRAZOLE SODIUM 40 mg	1 pill	By mouth

**Individualized:**

- Timing
- Rationale
- Medicine
- Dose
- Route

## AHCP Example: Appointment Page

Bring this Plan to ALL Appointments		
Oscar Sanchez		
<b>What is my main medical problem?</b> Chest Pain		
<b>When are my appointments?</b>		
Wednesday, August 8th at 11:30 am	Thursday, August 16th at 3:20 pm	Wednesday, September 12th at 9:00 am
Dr. Mark Avery Primary Care Provider (Doctor)	Dr. Anita Jones Rheumatologist	Dr. Lin Wu Cardiologist
100 Main St., 2nd Floor Anytown, ST	100 Pleasant Rd., Suite 105 Anytown, ST	100 Park Rd, Suite 504 Anytown, ST
For a Followup appointment	For your arthritis	To check your Heart
Office Phone #: (555) 555-5555	Office Phone #: (555) 555-5555	Office Phone #: (555) 555-5555



**Appointment:**

- Date
- Provider
- Location
- Reason
- Phone #

## AHCP Example: Additional Information

<b>What exercises are good for me?</b> Walk for at least 20 minutes each day.	<b>Additional:</b> Exercise
<b>What should I eat?</b> Eating food that is low in fat and low in cholesterol will help you stay healthy.	Diet
<b>What are my medicine allergies?</b> REMEMBER you are ALLERGIC to MOTRIN.	Medicine Allergy
<b>Where is my pharmacy?</b> Joe's Pharmacy 1234 Summertime Ave. Anytown, ST 55555 (555) 555-7777	Pharmacy

## AHCP Example: Patient Activation Page

	<p><b>Questions for Dr. Avery For my appointment on Wednesday, August 8th at 11:30 am</b></p>	
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Check the box and write notes to remember what to talk about with Dr. Avery

I have questions about:

my medicines \_\_\_\_\_

my pain \_\_\_\_\_

feeling stressed \_\_\_\_\_

What other questions do you have? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Space to write down questions or concerns for primary care provider.

Tell Dr. Avery: When I left the hospital, results from an examination of stomach tissue to look for *H. pylori* were not available. Please check for results of these tests.

## AHCP Example: Appointment Calendar

**August 2012**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Delivery of Bed by Martin Inc. 555-555- 5555	2	3 Followup phone call	4
5	6	7	8 Dr. Avery at 11:30 am 100 Main St. 2nd Floor, Anytown, ST	9 N.E. VNA to visit 555-555-5555	10	11
12	13	14	15	16 Dr. Jones at 3:20 pm, 100 Pleasant Rd., Suite 105, Anytown, ST	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Color coordinated (with upcoming holidays noted)

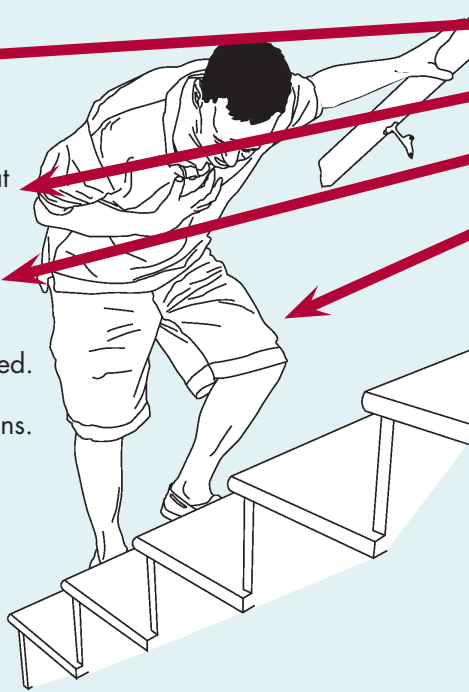
## AHCP Example: Diagnosis Information

My Medical Problem

### Noncardiac Chest Pain

Noncardiac chest pain is pain that is not caused by a heart problem.

- If your chest pain gets different or worse, call your doctor.
- Take your medicines as prescribed.
- See your doctor and ask questions.



### Diagnosis:

**Name**

**Definition**

**Tips**

**Visualization**

# Tool 4: How To Deliver the Re-Engineered Discharge to Diverse Populations

## Purpose of This Tool

The U.S. is made up of diverse multicultural populations.<sup>1</sup> Cross-cultural health care encounters involving a broad array of patients with diverse health beliefs, language preferences, cultural norms, and health-seeking behaviors occur everyday across the country. While many providers provide excellent cross-cultural care, language barriers and cultural diversity are still associated with worse care and preventable rehospitalization in many organizations.

The delivery of culturally and linguistically appropriate services is addressed throughout the Re-Engineered Discharge (RED) toolkit, but this tool specifically aims to:

- Explain why it is important to address patients' cultural and linguistic needs as part of the RED.
- Describe the infrastructure needed to deliver the RED in a culturally and linguistically competent manner.
- Describe how discharge educators (DEs) can deliver the RED to patients with a diversity of language, culture, race, ethnicity, education, or health literacy.
- Provide DEs with practical strategies to ensure the successful delivery of the RED to patients with cultural and language assistance needs, using effective cross-cultural communication and educational strategies.

This RED tool is meant to be used in concert with the other tools in the RED toolkit.

## Role of Culture, Language, and Health Literacy in Readmissions

Improving the discharge process for people who experience language barriers, cultural differences, and limited health literacy is a critical component of improving the quality of care and avoiding preventable readmissions.

### Culture and Its Relationship to Readmissions

Culture is the learned, shared patterns of beliefs, values, attitudes, and behaviors characteristic of a society or population.<sup>3</sup> From this cultural context emerges the patient's health belief system and explanatory models of illness.<sup>4</sup> Patients' explanatory models for their health and well-being include their understanding of the causes, treatment options, and outcomes associated with their ailments. The case example on the next page shows how failing to address patients' beliefs can lead to readmission.

### **The Case of Asthma Beliefs**

An asthmatic patient of Chinese ancestry was prescribed a course of systemic steroids. The patient returned to the hospital shortly after discharge with a severe asthma attack. When asked about adherence to the discharge plan, the patient reported that he had not taken the systemic steroids and had instead received “cupping” therapy from a practitioner of Chinese medicine. Cupping therapy is a treatment to enhance and improve the immune system.

Had the DE elicited and discussed the patient’s health beliefs regarding what he thought caused and would cure his illness, she might have discovered that the patient thought asthma was the result of a weak immune system and would resist taking medicine that suppresses the immune system. At that point the DE would have had the opportunity to discuss how the medicine could be taken along with cupping therapy, and could even have brought in a cupping therapist to help negotiate a discharge plan that would be acceptable to the patient.

In cross-cultural clinical encounters, multiple cultural influences and health belief systems come into play, such as the culture of the provider, the culture of the patient, and the culture of the health care system. When these cultures clash, misunderstandings about the nature of an illness, its remedies, and appropriate health behaviors are more likely to occur. Cross-cultural communication, which requires an exchange of shared meaning, can occur even when both parties speak the same language.<sup>5</sup>

Aside from the potential for deteriorating health or readmission as a result of the patient’s not understanding the discharge plan, communication barriers can lead to a sense of not being understood as a person. This can lead to mistrust and treatment nonadherence, which can threaten the successful transition from hospital to home.<sup>6</sup> Thus, failing to address culture and language in the discharge planning process may expose patients to otherwise preventable adverse events and readmissions.

### **Language and Its Relationship to Readmissions and Patient Safety**

Limited English proficiency (LEP), the limited ability to speak English, can prevent people from interacting effectively with health care providers. More than 20 million people, or 8.6 percent of the U.S. population, have LEP.<sup>7</sup> People with LEP are 40 percent more likely to experience physical harm associated with an adverse event than English-speaking patients, and adverse events reported by LEP patients are more likely to be due to communication errors.<sup>8</sup> However, patients who used professional interpreters at the time of hospital admission had a shorter length of stay and were less likely to be readmitted to the hospital in the next 30 days than those who did not have professional language interpreters at admission.<sup>9</sup>

Without appropriate language assistance for LEP patients (i.e., interpretation and translation services), DEs will face challenges in teaching patients how to take care of themselves when they get home, including how to take their medicines. Arrangements for appropriate language assistance after discharge (e.g., postdischarge followup phone call, subsequent laboratory tests, followup appointments) are also needed.

### **Health Literacy and Its Relationship to Readmissions**

Health literacy refers to a patient’s ability “to obtain, process, and understand basic health information and services needed to make appropriate health decisions.”<sup>10</sup> It is estimated that 77



million adults in the United States have limited health literacy and that health literacy barriers are more common among minority adults and those who did not speak English before going to school.<sup>11</sup> Sickness and the stress of hospitalization can lower health literacy, so all patients are at risk of misunderstanding important information.

Limited health literacy has been linked to more frequent hospitalization and readmissions.<sup>12,13</sup> The Joint Commission, in its report *What Did the Doctor Say? Improving Health Literacy to Protect Patient Safety*, recommends practices to avoid miscommunication that could lead to readmission.<sup>14</sup> These practices are part of the RED and are described in detail in the following sections.

## Preparations for Providing the RED to Diverse Populations

As part of preparing to provide the RED to diverse populations, consult the *National Standards on Culturally and Linguistically Appropriate Services*,<sup>15</sup> a set of recommendations from the Department of Health and Human Services' Office of Minority Health. This section applies some of the standards to the implementation of the RED.

### Hiring Bilingual, Bicultural Discharge Educators

Staff who share the language and cultural background of the community a hospital serves help create a welcoming environment that facilitates clear communication.<sup>16</sup> If you have a concentration of LEP patients who prefer to use a particular language, consider hiring a DE who is bilingual and bicultural. If you hire a bilingual DE, you must ensure he or she is proficient in both languages.

If you expect bilingual DEs to interpret for other medical team members, you must make sure they are trained in medical interpreting and are qualified to fill that role. It can be tempting to try to “get by” with staff members who do not possess proficient language skills or by asking bilingual staff who do not have proper training to interpret. Professional development may be needed to avoid significant patient safety risks that can result from inadequate skills.

### Providing Cultural and Linguistic Competence Training

All DEs should participate in formal training in cross-cultural health care to gain a full appreciation of how culture and language influence health care. Even bicultural and bilingual DEs will be asked to provide services to patients with cultural and language preferences that differ from their own. DEs should strive to cultivate cultural self-awareness, avoid making assumptions about patients' needs, and be open to learning from patients themselves.<sup>16</sup>

Some free resources for cultural competence training include:

- Effective Communication Tools for Healthcare Professionals (Health Resources and Services Administration [HRSA]), available at [www.hrsa.gov/publichealth/healthliteracy/index.html](http://www.hrsa.gov/publichealth/healthliteracy/index.html).
- Think Cultural Health (Office of Minority Health), available at <https://www.thinkculturalhealth.hhs.gov>.
- The Provider's Guide to Quality and Culture (HRSA), available at <http://erc.msh.org/mainpage.cfm?file=1.0.htm&module=provider&language=English>.

## Ensuring Availability of Interpreter and Translation Services

All recipients of Federal funds, such as Medicare or Medicaid providers, must offer language assistance to any person requiring such services in a health care setting.<sup>17</sup> Language assistance includes the provision of both interpreter services (for oral communication) and translation services (for written communication). Access to language services facilitates patient participation in care. Investing in language services can help prevent costly readmissions and reduce the cost of providing high-quality health care.<sup>18</sup>

Qualified medical interpreters, defined in the text box below, should assist in all in-person and phone encounters with LEP patients. Even if a patient speaks English fluently, it may be necessary to employ interpreter services to help teach the discharge plan to supportive caregivers. Qualified translators are also needed to make written information available in the patient’s preferred language.

### What Is a Qualified Medical Interpreter?

A qualified medical interpreter is fluent in English and in the language of a non-English speaker, is trained and proficient in the skill and ethics of interpreting, and is knowledgeable about specialized medical terms and concepts. The National Council on Interpreting in Health Care ([www.ncihc.org](http://www.ncihc.org)) has published a code of ethics and standards of practice for interpreters in health care. Currently two organizations, the National Board of Certification for Medical Interpreters ([www.certifiedmedicalinterpreters.org](http://www.certifiedmedicalinterpreters.org)) and the Certification Commission for Healthcare Interpreters ([www.healthcareinterpretercertification.org/](http://www.healthcareinterpretercertification.org/)), certify interpreters in some languages.

Your hospital should have a language access plan that describes how patients’ language assistance needs are identified and how they will be met. Resources that provide guidance in developing language assistance plans include *A Patient-Centered Guide to Implementing Language Access Services in Health Care Organizations*<sup>19</sup> and the *Speaking Together Toolkit*.<sup>20</sup>

## Overview of Delivering the RED to Diverse Patient Populations

Patients can benefit from a linguistically and culturally appropriate approach to implementing RED components. Some of the ways this can be done are listed in Table 1.

**Table 1. RED Components and DE Responsibilities for Diverse Patients**

RED Component	DE Responsibilities for Diverse Patients
1. Ascertain need for and obtain language assistance.	<ul style="list-style-type: none"> <li>• Find out about preferred languages for in-person oral communication, phone communication, and written materials.</li> <li>• Determine patient’s and caregivers’ English proficiency.</li> <li>• Arrange for language assistance as needed, including translation of written materials.</li> </ul>
2. Make appointments for followup care (e.g., medical appointments, postdischarge tests/labs).	<ul style="list-style-type: none"> <li>• Inform providers of patient’s language preference, language assistance needs, and cultural considerations.</li> <li>• When possible, schedule patients with providers who have appropriate linguistic and cultural competence.</li> </ul>

*continued*

**Table 1. RED Components and DE Responsibilities (continued)**

RED Component	DE Responsibilities for Diverse Patients
3. Plan the followup of results from tests or labs that are pending at discharge.	<ul style="list-style-type: none"> <li>• Alert person conveying results of the tests to patient of language preference, language assistance needs, and cultural considerations.</li> </ul>
4. Organize postdischarge outpatient services and medical equipment.	<ul style="list-style-type: none"> <li>• Collaborate with case manager to ensure that instructions for durable medical equipment are in patient’s and caregivers’ preferred languages.</li> <li>• Obtain interpreter services, if needed.</li> <li>• Determine whether there are any cultural barriers to use of durable medical equipment.</li> </ul>
5. Identify the correct medicines and a plan for the patient to obtain them.	<ul style="list-style-type: none"> <li>• Obtain interpreter services, if needed.</li> <li>• Ascertain what vitamins, herbal medicines, or other supplements patient takes and use of complementary and alternative medicine (CAM) therapies.</li> <li>• Alert medical team to any possible drug-drug or drug-CAM interactions or harmful supplements.</li> <li>• Assess patient’s concerns about medicine plan, especially conflicts with health beliefs.</li> <li>• Confirm understanding through teach-back of what medicines are for, why it is important to take them, when and how to take them, and how much to take.</li> </ul>
6. Reconcile the discharge plan with national guidelines.	<ul style="list-style-type: none"> <li>• Check whether modifications to national guidelines are appropriate for particular racial or ethnic groups.</li> </ul>
7. Teach a written discharge plan the patient can understand.	<ul style="list-style-type: none"> <li>• Obtain interpreter services, if needed.</li> <li>• Create an After Hospital Care Plan (AHCP) in the patient’s preferred language as well as in English.</li> <li>• Determine whether patient has any cultural concerns with the AHCP.</li> <li>• Check that symbols and pictorial cues on AHCP medicine schedule are meaningful.</li> <li>• Be respectful of the patient’s culture and communicate an ethic of caring.</li> <li>• Ensure that dietary advice is consistent with religious or cultural practices.</li> </ul>
8. Educate the patient about his or her diagnosis and medicines.	<ul style="list-style-type: none"> <li>• Obtain interpreter services, if needed.</li> <li>• Elicit patient’s/family’s explanatory model of the illness.</li> <li>• Inquire about role of lay healers, faith healers, and CAM therapy use.</li> <li>• Identify key family members and the patient’s CAM healers to engage in explaining the diagnosis in a way the patient can understand and to support adherence to the AHCP.</li> <li>• Document cultural considerations.</li> </ul>

*continued*

**Table 1. RED Components and DE Responsibilities for Diverse Patients (continued)**

RED Component	DE Responsibilities for Diverse Patients
9. Review with the patient what to do if a problem arises.	<ul style="list-style-type: none"> <li>• Obtain interpreter services, if needed.</li> <li>• Ensure that language assistance is available at the DE help line and the primary care provider after hours contact numbers and notify patient of that availability, if needed.</li> <li>• Elicit beliefs as to what constitutes an emergency, reach an understanding, and instruct on what to do in cases of emergency.</li> </ul>
10. Assess the degree of the patient’s understanding of the discharge plan.	<ul style="list-style-type: none"> <li>• Obtain interpreter services, if needed.</li> <li>• Assess the degree of understanding by asking patients to explain in their own words the details of the plan.</li> <li>• Contact family members and/or other caregivers who will share in the caregiving responsibilities, if needed.</li> <li>• Identify mistrust of treatment plan that might result from conflicting patient beliefs/practices, and create plan to mitigate.</li> </ul>
11. Expedite transmission of the discharge summary to clinicians accepting care of the patient.	<ul style="list-style-type: none"> <li>• Include information about language preference, language assistance needs, use of CAM, and cultural considerations.</li> </ul>
12. Provide telephone reinforcement of the discharge plan.	<ul style="list-style-type: none"> <li>• Obtain interpreter services, if needed.</li> <li>• Probe as to whether there are any cultural or language barriers to following discharge plan.</li> </ul>

**Note: The rest of this tool addresses the DE directly.**

## Getting Started With the RED for Diverse Populations

Strategies that assist health professionals to anticipate, identify, and address cultural and linguistic communication barriers can significantly improve the hospital discharge experience and reduce unnecessary readmissions. Your awareness of the potential for cross-cultural communication barriers and use of strategies to anticipate and address these barriers can help avert mishaps. It is therefore essential for you to know how to assess communication and cultural needs and implement strategies to address barriers when providing the RED.

### Assessing Communication Needs

To provide culturally and linguistically appropriate services, you first need to assess your patient’s communication and cultural needs.

- Inquire and document any specific patient needs for language assistance. This includes language preference for verbal and written communication and the need for interpreter and translation services. See the HRET disparities toolkit for guidance, available at [www.hretdisparities.org/](http://www.hretdisparities.org/).<sup>21</sup>

- Be sensitive to the fact that patients' language skills can diminish under stress. Patients who are usually proficient in English may find themselves needing language assistance. Also consider the language assistance needs of those who will help take care of the patient at home.
- Conduct a thorough and respectful inquiry into the unique cultural patterns and values of patients. For example, check with the patient about dietary changes that may concern him or her, such as fasting or cultural food practices related to holidays or religious observances. This will allow you to tailor the discharge teaching to meet patients' needs and to ensure that patients' values and norms are integrated into the plan for care when the patient is at home.
- Use materials and teaching methods (such as the teach-back method) that are appropriate for all levels of health literacy. This is a universal precautions approach and eliminates the need for health literacy screening.<sup>22,23</sup>

## Using Nonverbal Communication Styles While Teaching the RED

While language is often the most commonly examined aspect of communication, nonverbal communication is a powerful and culturally rooted form of interaction. Nonverbal communication includes not only facial expressions and gestures, but also personal distance and time references. Here are some examples of how nonverbal communication can affect your conversation with patients.

- **Assertiveness:** Differences in cultural norms regarding the appropriate degree of demonstrated assertiveness in communicating can create misunderstandings. For example, some racial or ethnic groups carry a legacy of discrimination in medical treatment. As such, they may present for care with the expectation of needing to advocate earnestly for the care they need and deserve. This can be expressed or perceived as aggression and create tension, resulting in undertreatment of pain, disregard of serious symptoms, or low patient confidence in providers and treatment plans.
- **Deference:** Alternatively, some patients will not make eye contact with a provider as a sign of deference and respect toward the provider. However, this behavior can be misconstrued by providers as mistrust or dishonesty. In such a case, it is best to follow the patient's lead and not impose eye contact when it is not desired.
- **Agreeability:** Finally, some patients always seem to agree, nod, and smile in response to everything you say. This can be due to a range of phenomena, including fear of the shame that could occur if the patient's lack of comprehension were revealed or simply the desire to please. Frequently, people mask their confusion. When this occurs, try the teach-back method to assess understanding and shared meaning.

## Understanding Health Beliefs, Alternative Healers, and Attitudes About Medicines

People's sociocultural background influences their approach to health care and shapes their world view and values regarding health and illness.<sup>6</sup> Patients and their families and health professionals may not share the same health beliefs, such as what causes a disease or the benefits of traditional medicine. This diversity in health perspectives can heighten the risk of communication errors.

To ensure the success of a discharge plan, you should elicit the patient's understanding of his or her illness and explore how the individual wishes to address treatment. The Kleinman Questions in

Table 2 have been used to integrate a cross-cultural perspective into clinical medicine.<sup>6,24</sup> These questions can be asked during your first meeting with the patient. You should practice them in simulation to get accustomed to cross-cultural inquiry.

### **Table 2. The Kleinman Questions**

- What do you think has caused your problem?
- Why do you think it started when it did?
- What do you think your sickness does to you? How does it work?
- How severe is your sickness?
- Will it have a short or long course?
- What kind of treatment do you think you should receive?
- What are the most important results you hope to receive from this treatment?
- What are the chief problems your sickness has caused for you?
- What do you fear most about your sickness?

Reassure your patient that his or her answers to these questions will help you in developing a comprehensive and effective treatment plan. If a treatment plan is not congruent with the patient and family's health beliefs, it is unlikely to be followed. In the discharge summary, you should inform the clinicians taking care of the patient about health beliefs and other cultural considerations.

You can encourage this discussion by asking such questions as:

- “How do you prefer to treat your [condition, such as high blood pressure]?”
- “Do you find it easy to take your prescribed medicines or do you prefer other kinds of treatment?”
- “Is there anything that you'd be worried about if you took these medicines?”
- “What do you think will help you get better?”
- “Do you see anyone else who helps you with this problem?”
- “Do you take any herbs or anything else to help you with this problem?”

### **Understanding Patients and Communicating Across Differences**

Strive to overcome barriers to effective communication by approaching all patients with positive regard and an ethic of caring.<sup>25,26</sup> This can be done by being:

- Attentive.
- Honest.
- Patient.
- Respectful.
- Compassionate.
- Trustworthy.

In addition to the techniques listed in Tool 3, “How To Deliver the RED at Your Hospital,” the following are important:

- Creating a relaxed atmosphere.
- Repeating important messages.
- Phrasing information and posing questions in different ways.
- Accepting responsibility for a lack of understanding.

## Teaching the AHCP to Patients With Limited English Proficiency

Print the AHCP in the patient’s preferred language, if possible. The RED Workstation can print the AHCP in English, Chinese, and Spanish. Provide the AHCP in the patient’s preferred language, as well as in English for the benefit of health care providers and caregivers who read English. AHCPs that are not printed in the patient’s preferred language should have a space in each section for a medical translator to write the translated discharge instructions in the patient’s own language. Be sure that this is legible in the space provided.

Some tips for teaching the AHCP to patients with LEP are listed below:

- Some cultural groups are reluctant to ask questions, which they see as challenging the authority of the health care provider. Emphasize that all patients have questions, you want to hear their questions, and you find questions reassuring rather than offensive.
- Some patients are especially reluctant to reveal that they do not understand something, fearing that they will lose face. It is your responsibility to check that they do understand. Use the teach-back method to assess comprehension of discharge instructions, as described in Tool 3, “How To Deliver the RED at Your Hospital.”
- Just like English-proficient patients, not all patients with LEP can read in their preferred language. Do not rely on the patient being able to read the AHCP. Make sure you have instructed the patient on all elements of the AHCP and confirmed that the patient understands.
- The AHCP was designed to use symbols and color codes to help make the instructions understandable for patients with low health literacy or LEP. Be sure to explain the meaning of the symbols clearly and confirm shared meaning between you and the patient with respect to what the symbols indicate. For example, be sure to explain clearly that a sun symbol on the medication instruction sheet means to take the medicine in the morning or that a moon symbol means to take the medicine in the evening.
- The AHCP includes a color-coded calendar to help patients learn how to take medicines and to help them remember the correct dates of their followup appointments. When printed using the Workstation, the calendar will offer to record major religious observances for a wide array of faiths. When helping patients arrange followup appointments, you can reference the calendar to determine whether any special religious observances will occur in the 30-day period following discharge. This information may be important when scheduling followup appointments or to determine whether the occasion involves special foods or fasting that might require additional education or a change in the treatment plan.

## Using Qualified Medical Interpreters To Create and Teach the After Hospital Care Plan

If your patient speaks English less than proficiently and you are not a documented bilingual provider in your patient’s preferred language, arrange for a qualified medical interpreter. It may be tempting to “get by” if your patient speaks some English or if you speak your patient’s language well enough to have a conversation. “Getting by,” however, can lead to medical errors. If an in-person interpreter is not immediately available and the need to talk with your patient is urgent, engage a telephone interpreter while you are waiting.

Do not use family or friends or others who are not qualified medical interpreters to interpret. Medical interpreting requires specialized skill and training. Further, patients have a legal right to determine whether they want family and friends to know their private medical information. Even if the patient prefers having a family member or friend interpret, also have a qualified medical interpreter present to correct any errors in interpretation. Never use a child under the age of 18 to interpret. Family members can be encouraged to support the patient and treatment plan rather than to serve as interpreters.

Familiarize yourself with the language assistance programs at your hospital. Learn the proper procedures for requesting language assistance and be aware if advance notice is needed. When arranging for language assistance for the final interaction when the AHCP is taught, be sure to inform the medical interpreter that up to 1 hour of assistance might be required. If you have little or no experience working with medical interpreters, find out what training is available to help you work more effectively and efficiently with interpreters.

### Working With Qualified Medical Interpreters

A few tips for working with qualified medical interpreters are included here as an introduction. This is not a substitute for formal training on working with interpreters. More information about working with people with limited English proficiency is available in AHRQ’s Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS®) training module, *Enhancing Safety for Patients With Limited English Proficiency*, available at [www.ahrq.gov/professionals/education/curriculum-tools/teamstepps/](http://www.ahrq.gov/professionals/education/curriculum-tools/teamstepps/).

- **Preparation.** Before seeing the patient, brief the interpreter about the RED, what your role is, and what the goals are for the teaching session. Share relevant patient background information with the interpreter. Ask the interpreter what he or she needs from you during the meeting. Also ask the interpreter to inform you whenever he or she engages in conversation or diversions from the exact sentence by sentence interpretation with the patient. The interpreter may break role if the patient addresses him or her directly with a question or statement or if the interpreter wants to make a suggestion to you as a cultural expert. Let the interpreter know that you expect him or her to alert you to any concerns about potential safety issues.

#### Interpreter Tip

Direct your empathy and response in English toward the patient. Remember to always look toward the patient when you are speaking, not toward the qualified medical interpreter. The qualified medical interpreter will provide the verbal translation of your words. However, you will still engage in nonverbal communication.



- **Etiquette.** Address the patient, not the interpreter, and maintain eye contact with the patient. Try not to “think out loud” or have side conversations with the interpreter. This can cause patients to wonder about what is not being interpreted for them and can impair the rapport building process.
- **Dialogue.** Talk slowly and clearly at a comfortable pace with pauses that allow for interpretation. Use plain language, not jargon. Confirm understanding and comprehension, asking the interpreter to give you the patient’s exact words, not paraphrases, whenever possible. Make sure the interpreter is present for the entire conversation with the patient.
- **Debrief.** After your session with the patient, ask the interpreter if he or she noticed anything pertaining to the patient that had not been expressed, such as subtle gestures or emotions.
- **Documentation.** Document the presence of the qualified medical interpreter, the interpreter’s name, and the name of the language service agency.

## Accessing Interpreters by Phone and Video

Training in both the use of language assistance devices and working effectively with a remote interpreter is essential. If you lack experience with language assistance devices, it is strongly recommended that you conduct a practice session before the initial patient meeting. For example, when using a telephone interpreter service, find out if there is a speakerphone or a dual handset so that both you and the patient have individual telephone handsets for use during your session. Practice connecting to the telephone and video interpreters and make sure the phone numbers, video links, and access codes are operational.

## Handling Patient Refusal of Language Assistance

Occasionally, a patient with LEP will decline the assistance of an interpreter, believing that his or her English skills are sufficient, or will ask to use a friend or family member for interpretation. You should:

- Make clear that interpreter services are provided free of charge.
- Explain that it is the hospital’s policy to provide interpreter services.
- Obtain hospital interpreter services **even if the patient uses a friend or family member.** You should honor the patient’s choice, but you also have the right to have a qualified medical interpreter present. Some hospitals have a “silent” interpreter present when friends or family members interpret who speaks only to correct omissions or mistakes in interpretation. Having qualified medical interpreters present also helps protect the hospital from potential liability regarding miscommunication.<sup>27,28</sup>

## Understanding the Role of Family and Community

Family and community support is often essential to a patient’s safe transition from hospital to home. In some cultures, the role of family members, and even members of the broader community (e.g., religious or spiritual leaders, traditional healers), is instrumental in the treatment of illness and medical decisionmaking. Neglecting to assess the presence and influence of family and community members before hospital discharge could lead to nonadherence to the discharge plan, dissatisfaction

with the medical care received, and hospital readmission for relapse of symptoms or other adverse events following discharge. It is important, therefore, that you inquire and assess family and community involvement in a patient's care early in the hospital course.

The following are some ways cultural differences can influence your interactions with family and community members.

- **“Bad News.”** Issues of “truth telling” about serious diagnoses present dilemmas for patients, families, and medical team members. For example, there are cultural differences in beliefs about the power of hope and the negative consequences associated with losing hope. In certain cultural contexts, family members may object to disclosing a serious diagnosis to the patient. If the family advocates nondisclosure, fearing a decline in the patient's condition if informed about his or her condition, confer with the medical team on how to proceed.
- **“First-Line Responder.”** Some 90 percent of sickness episodes are managed exclusively within the circle of family and community lay healers.<sup>4,6</sup> Given that the family is often the “first-line responder” to a sickness at home, it is especially important that they be advised on what to expect in the postdischarge period. Consider family members as more than potential personal caregivers in the home or transportation support for followup appointments, but also as lay healers and advisors to the ill patient.
- **Arbiters About Following Advice.** Family or community leaders' or healers' concurrence with treatment recommendations at home may be essential to the patient's willingness to follow them. Find out from your patients whose judgments they rely on. If possible, obtain that person's agreement about seeking help, following treatment regimens, taking medicines, and attending appointments.
- **“Consultant Healer.”** Even when the patient is hospitalized, his or her family and spiritual or cultural healers may remain involved in treatment decisions. They often assess the quality of care, influence the patient's expression of symptoms, and shape the patient's understanding and expectations of the health care experience. Be respectful of these “consultant healers” and enlist their cooperation in postdischarge treatment.
- **Autonomy in Care and Decisionmaking at Home.** In some cultures, family members play significant roles in care and decisionmaking for loved ones. While western norms emphasize personal autonomy, certain cultures have a more family-centered approach to decisionmaking and other cultures tend toward a more hierarchical kinship structure for decisions. Patient preferences must be balanced with standards of care regarding informed consent and confidentiality.

#### **Disclosure of Bad News**

The disclosure of bad news such as a terminal diagnosis is a commonly encountered cross-cultural issue in health care. The health care system in the United States and other western countries places great emphasis on patient autonomy. The Patient Self-Determination Act secures this right legally for all patients in the United States, but its relevance to patients of various cultural backgrounds has often been debated.

It is a good idea to ask the medical team if you have any concerns about the family or community members' role as you prepare the patient for discharge.

## Additional Considerations

You may ask questions to assess other culturally influenced factors that can relate to readmissions. These factors include dietary patterns, religious observance, gender preferences for caregivers, sexual orientation and gender identity, and mental health.

### Dietary Patterns

Conflicts with the dietary recommendations in the discharge plan can lead to setbacks in the transition from the hospital to home. You can ask the patient to review the dietary recommendations and assess whether the patient anticipates a problem adhering to the nutrition plan. If so, you can consult with the hospital dietitian to receive more information about how to assist the patient.

#### Cultural Competency Tip

Make sure the nutrition plan is culturally relevant and includes foods that the patient is accustomed to eating at home.

### Religious Observances

It is not uncommon for patients to adjust medication regimens and dietary patterns as part of religious observances. Such observances may include fasting or consuming special meals prepared for the occasion or may prohibit the use of certain treatments during periods of observance. Sometimes, these changes can jeopardize the success of the discharge plan. Try the following:

- Use the AHCP calendar to identify common religious observances and ask the patient if there are religious observances not marked on the calendar that will be observed in the month following discharge.
- Assess whether the patient's religious observance affects the discharge plan. If necessary, the medical team can be alerted to the potential problem and the discharge plan can be adjusted.

### Gender Preferences

For some patients, the gender of a provider is important to the delivery of health care. Gender preference may even extend to nonclinical staff, such as front office support and interpreters, who are engaged in collecting private health information. For example, female patients often prefer a female gynecologist. Indeed, in certain cultures, it is unacceptable for a male provider to treat a female patient.

When arranging for followup appointments, you should ask the patient if he or she has any preferences for a certain provider or whether gender is a concern. Attending to this cultural preference for health care will help increase the likelihood of successful continuity of care in the ambulatory setting and reduce the risk of readmission.

### Sexual Orientation and Gender Identity

Many lesbian, gay, bisexual, and transgender (LGBT) individuals avoid or delay care because of perceived or real homophobia, biphobia, or transphobia. Create a nonjudgmental and secure environment so that LGBT patients feel comfortable. Be sensitive to your verbal and body language. Do not make assumptions about your patient's sexual orientation or gender identity, such as assuming that a same sex caregiver is or is not the patient's partner.

Be sure that partners of LGBT patients are afforded the same regard and hospital privileges as spouses. Training on LGBT-specific skills can help you gain confidence in how to provide appropriate care to LGBT patients.

## Mental Health

Mental health disorders, though common among hospitalized patients, are frequently undiagnosed and untreated and become important risk factors for rehospitalization.<sup>29</sup> The populations below are at particular risk of unmanaged mental health difficulties:

- Individuals whose symptoms are not recognized as diagnostic features of specific disorders because they have culturally mediated characteristics.<sup>30,31</sup>
- Individuals who belong to cultures where psychiatric illness is highly stigmatized.
- Individuals who do not realize that there are services that could help them because they come from societies where there are no mental health providers.
- Individuals who have had trouble accessing mental health services due to language and cultural barriers.
- Individuals who have been exposed to violence and trauma and are at heightened risk for posttraumatic stress disorder. A patient's trauma history is frequently not known by the physician.<sup>32</sup>

To start exploring the possibility of mental health symptoms, you might ask the following:

- “It can be very stressful to be sick and to be in the hospital. How have you been holding up? How have you been dealing with your stress?”

You can also investigate specific circumstances that lead to mental health disorders. For example, when working with foreign-born patients, find out where they are from and when they left. It is quite useful to know some of the basic social and political history for your patient's country of origin.

Sources such as the CIA World Factbook are easy to use to learn information about countries and give you a sense of some of the challenges your patients may have faced.<sup>33</sup> To learn if your patient was likely to have been dislocated due to war, famine, or natural or political disaster, you might ask the following:

- “What was happening when you left your country?”
- “Many people who left your country at that time were exposed to violence. Did that happen to you?”

Report any suspected mental health issues to the medical team for them to investigate and plan for treatment if needed.

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# Tool 5: How To Conduct a Postdischarge Followup Phone Call

## Purpose of This Tool

The Re-Engineered Discharge (RED) aims to effectively prepare patients and families for discharge from the hospital, improve patient and family satisfaction, and decrease hospital readmission rates. The postdischarge followup phone call, the 12th component of the RED, is an essential part of supporting the patient from the time of discharge until his or her first appointment for followup care. Tool 2, “How To Begin Implementing the RED,” discusses the options for assigning staff to conduct the call.

All RED patients should be called 2 to 3 days after discharge by a member of the clinical staff. This postdischarge followup phone call allows the patient’s actions, questions, and misunderstandings, including discrepancies in the discharge plan, to be identified and addressed, as well as any concerns from caregivers or family members. Callers review each patient’s:

- Health status,
- Medicines,
- Appointments,
- Home services, and
- Plan for what to do if a problem arises.

“We found out during the followup phone call that a patient wasn’t taking her diuretic because the bathroom was on the other side of her house. We got her a commode and averted a readmission.”

—RED Hospital in Pennsylvania

This tool addresses the person who will make the followup phone call. After reading this tool, you will:

- Know how prepare for the phone call.
- Be proficient in completing a postdischarge followup phone call.
- Be able to conduct appropriate postcall actions.

## Preparing for the Phone Call

### Ensure Continuity of Care

If you are the discharge educator (DE) who provided the in-hospital RED components, you will be familiar with the patient. This will help you maintain continuity between the inpatient stay and the followup call. Still, you need to recognize that your patient is now in a different setting and you may need to tailor your communication style to the patient’s current needs.

If your hospital has chosen to use a different person to provide the in-hospital RED components and to complete the call, you should:

- Communicate with the DE in order to have a smooth handoff and obtain important information about the patient and family that the DE has learned while working with the patient.
- Familiarize yourself with the patient by reviewing the information about the hospital stay thoroughly. (See “Review Health History and Discharge Plan” below.)

The remainder of this tool will instruct you as if you are not the DE.

## Learn How To Confirm Understanding

Throughout the followup call, you will need to confirm that the person you are speaking with understands what you are discussing. One of the easiest ways to close the communication gap between patients and educators is to use the “teach-back” method. Teach-back is a way to confirm that you have explained to the patient what he or she needs to know in a manner that the patient understands. Patient understanding is confirmed when he or she explains the information back to you in his or her own words. Lack of understanding and errors can then be rectified with further directed teaching and reevaluation of comprehension.

A video demonstration of the teach-back method is available at: [www.nchealthliteracy.org/teachingaids.html](http://www.nchealthliteracy.org/teachingaids.html). Some points to keep in mind include:

- This is not a test of the patient’s knowledge; it is a test of how well you explained the concepts.
- Be sure to use this technique with **all** your patients, including those who you think understand as well as those you think are struggling with understanding.
- If your patients cannot remember or accurately repeat what you asked them, clarify the information that you presented and allow them to teach back again. Do this until the patient can correctly describe your directions in his or her own words.

## Review Health History and Discharge Plans

Before the phone call, obtain the patient’s hospital discharge summary, the After Hospital Care Plan (AHCP), and the DE’s notes. If the discharge summary is not complete or if an AHCP was not generated for the patient, you will need to collect this information from other sources. These may include the hospital medical record, notes from the clinician who discharged the patient, the inpatient clinicians who cared for the patient, and the ambulatory medical record.

You will need to be familiar with the patient’s health history and discharge plan before you make the followup phone call. Review the discharge summary and AHCP to find out about:

- Diagnosis and condition at discharge. You will ask the patient about his or her health status and discuss symptoms.
- Personal information, usual daily routines, relevant cultural practices, involvement of family, and relevant stressors and supports. This will help you make the call patient centered.
- Followup appointments. You will find out whether appointments have been completed and plans for future appointments.



- Home services and equipment. You will confirm that home services and equipment have been delivered as expected and discuss the need for additional home services.

## **Check Accuracy and Safety of Medicine Lists**

While the patient was in the hospital, the DE should have completed medication reconciliation. The goal of inpatient medication reconciliation is to produce a correct and consistent list for the patient and clinicians, where the medication lists are identical in the discharge summary, inpatient medical record, AHCP, and, if possible, the ambulatory medical record.

In certain cases, however, this may not have happened (e.g., patient leaves against medical advice or sooner than expected, patient is discharged at a time when a DE was not available).

To check whether the patient has been given an accurate medicine list, compare the list of medicines on the hospital discharge summary with the medicines listed in the AHCP. If medication reconciliation was done correctly at discharge, these lists should match. If they do not match, resolve the issue before the followup phone call by talking to the hospital team (starting with the DE) and/or primary care provider (PCP),<sup>1</sup> depending on the nature of the inconsistencies or errors identified.

Doublecheck the medicine list for potentially harmful drug interactions. This should have been done as part of the in-hospital medication reconciliation process but may not have been completed for the reasons discussed above. If you identify any drug interactions, speak with the hospital team (starting with the discharging physician) to get clarification and make any necessary changes to the patient's medicines.

## **Identify Problems Patients Could Have With Medicines**

Changes in medicine regimens can be particularly confusing to patients returning home. Note changes such as discontinuation of medicine taken prior to the hospital stay or a change in the dose. Any medicine with complicated instructions can also be a source of confusion. Pay special attention to medicines for which the adverse consequences of taking them incorrectly are severe.

Familiarize yourself with commonly known drug-food interactions and side effects prior to the call. This will enable you to actively elicit this information from the patient, as well as educate him or her on possible side effects.

## **Arrange for Interpreter Services**

The DE should have noted on the contact sheet (available online at [www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/)) whether an interpreter is needed for the phone call. If an interpreter is needed and your hospital has not documented that you are proficient in the language, arrange for interpreter services before the call. You can use a qualified hospital interpreter by using a speakerphone in a private location or a three-way phone system. You may also use a telephone interpreter that your hospital contracts with. Notify your interpreter services department in advance of when you will need an interpreter, for how long, and in what language.

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<sup>1</sup>In this toolkit we use the term PCP to refer to the clinician who has main responsibility for the patient, although specialists or other clinicians may be in charge of the patient's care.

You may have an unanticipated need for interpreter services. This can happen if a patient or caregiver’s English skills are sufficient for in-person communication but not for telephone communication, or if the need for interpreter services was not accurately recorded. Know the procedure to access immediate interpreter services.

More detailed information about using an interpreter, developing cultural and linguistic competence, and reducing disparities in health care communication is described in Tool 4, “How To Deliver the RED to Diverse Populations at Your Hospital.”

## Conducting the Phone Call

### Whom and When To Call

Before discharge, the DE will have collected contact information from the patient to facilitate reaching the patient or caregiver via phone within 72 hours of discharge. This information is written on the contact sheet, available online ([www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/)). It includes:

- Patient’s desire to have a legal proxy or caregiver receive the phone call, if applicable.
- Preferred language and need for interpreter (for person receiving the call).
- Contact information for patient, proxy, and caregivers.
- Ideal time of day and day of the week to reach patient, proxy, and caregivers.

When you plan your calls for the day, note that calls will vary in length, from approximately 20 to 60 minutes. The type of patient population you target can affect the length of calls. Patients taking more medicines will require longer calls.

Start your calls 48 hours after discharge. If the patient has delegated the phone call to his or her legal proxy (the person with legal authority to act on behalf of the patient) or his or her caregiver, call that person first.

- Call the patient or legal proxy or caregiver designated to receive the call at the time of day listed as the best.
- If you cannot reach this person the first time, make several attempts over the next few days.
- If you still cannot reach this person, call the next contact on the list. If you cannot reach or do not get useful information from the contacts on the list, check the information on file at the hospital for additional contact numbers.

### What To Say

The followup phone call consists of five components:

- Assessment of health status.
- Medicine check.
- Clarification of clinician appointments and lab tests.

- Coordination of postdischarge home services.
- Review of what to do if a health or medical problem arises.

The online tools ([www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/)) include a patient call script developed by the RED team to provide guidance for completing the call. Some hospitals, however, have found the call script too time consuming. Adapting the call script for your hospital and your RED patient population will focus the call and make efficient use of your time. A data collection sheet for documenting the call also is available online ([www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/)).

The script is just a guide. The phone calls will require flexibility and creativity. You will problem solve with patients and caregivers and refer any issues that require further intervention to the appropriate clinical team member. A fictionalized followup phone call script is available online ([www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/)). In this script, Brian, a nurse at the hospital, speaks with Mrs. Smith, a patient with congestive heart failure. This script, designed to be used for a role play at a training session for staff performing followup phone calls, gives you a sense of how a conversation might go.

### **Verify Availability To Talk and Need for Interpreter Services**

After introducing yourself, ask if it is a good time to talk. If it is not, get a precise time when you can call back. If the person says he or she only has a limited amount of time available, try to prioritize and tailor the call to meet the needs of that person.

Even if the contact sheet indicates that an interpreter is not necessary, you should independently assess the need for an interpreter. The DE may have assumed that people who could speak English without an interpreter at the hospital could comfortably complete the phone call in English. The telephone, however, presents another hurdle as it removes context, body language, and lip movement.

If you have any sense that the patient or caregiver is not proficient in English and you are not documented as proficient in the preferred language, let him or her know that you would like to use an interpreter. If an interpreter is not immediately available, schedule a time to call back.

Try to establish an open communication style so patients or caregivers share their hesitations or problems they are having with the discharge plan. Ask them to locate and bring the AHCP and all medicines, supplements, and traditional remedies to the phone.

### **Assess Health Status**

You will ask about the patient's:

- Comprehension of the reason for his or her hospital visit;
- Perception of any change in health status since discharge; and
- Understanding of how to manage any medical changes or whether he or she needs to seek medical care for any concerns (either relating to the primary discharge diagnosis or any new problems).

If the patient's health status has deteriorated, a plan of action may be needed. Interventions for patients reporting feeling worse since discharge due to primary discharge diagnosis, adverse drug event, or other symptoms may include:

- Providing patient education.
- Checking whether the patient is taking medicine as directed.
- Checking labs and reviewing medicine list for cause of complaint.
- Advising the patient to attend an upcoming scheduled appointment with his or her PCP.
- Recommending patient action (e.g., take a medicine that was prescribed to take as needed, limit activity).
- Advising the patient to call his or her DE, PCP, or specialist.
- Advising the patient to go to urgent care or the emergency department.
- Consulting with the DE, inpatient physician/team, or pharmacy.
- Alerting the PCP.
- Arranging a same-day sick appointment.
- Determining the family's perception of the patient's status.

## Check Medicines

The medicine check involves making sure patients or caregivers understand what the patients' medicines are for and how to take them. This part of the phone call can be lengthy, since each medicine needs to be reviewed: name, when they take it, how much they take, how they take it, why they take it, and any problems or side effects.

There are many potential barriers to adherence. Your job is to encourage the patient to share the most accurate information regarding what interferes with his or her willingness or ability to take the medicine. You might find it helpful to think about three sources of nonadherence:

- Intentional nonadherence.
- Inadvertent nonadherence.
- System/provider error.

**Intentional nonadherence.** When a patient has chosen not to take a medicine that is part of the discharge plan or insists on taking medicine in a manner other than prescribed or that is contraindicated. Reasons for patient's intentional nonadherence include:

- Personal, family, or cultural concerns regarding medicine;
- Concern regarding actual or feared side effects; and
- Difficulty filling prescriptions, including access to the pharmacy, insurance issues, and financial problems.

**Inadvertent nonadherence.** When a patient is not following the treatment plan due to difficulty understanding the plan or an inability to execute it. Examples of inadvertent nonadherence include:

- Failure to remove discontinued medicine from a pillbox.
- Inability to pay for or pick up medicines.
- Inability to understand instructions such as “take on an empty stomach” or “do not take with dairy products.”

**System/provider error.** When the hospital did not do something it was supposed to. Examples of system/provider errors include:

- Conflicting information (e.g., the AHCP lists one type of antibiotic while the prescription was issued for another).
- Missing information (e.g., AHCP did not list when patient should take medicine).
- Missing pieces of the discharge plan (e.g., prescription was not issued at discharge).

Some nonadherence problems can be solved by providing education to fill in knowledge gaps. Others may require your contacting the patient’s pharmacy, PCP, or DE or the inpatient physician who discharged the patient if there are any discrepancies between the discharge summary/AHCP and what the patient reports. If clarifying misunderstandings does not work with patients who are intentionally nonadherent, try enlisting the assistance of family members and spiritual leaders or traditional healers. See Tool 4, “How To Deliver the RED to Diverse Populations,” for more on the family and community’s role in patient treatment.

Once discrepancies are resolved, you will probably have to follow up with the patient with an additional phone call. Always conduct teach-back to confirm that the patient or caregiver understands how to take medicines. The box below illustrates how postdischarge phone calls can expose and resolve cases of intentional nonadherence.

### **The Case of Hypertension Beliefs**

**Background:** The patient, an African American woman, has been prescribed an angiotensin-converting enzyme (ACE) inhibitor for hypertension.

**Call:** The patient has not filled her prescription and is not taking the ACE inhibitor because she does not think it will do any good. The caller discovers that the patient considers the appropriate treatment for her hypertension to be mitigation of stress and emotional excitement, not medicine or diet.

**Action:** The caller clarifies that the medicine is effective for her condition, gets the patient’s agreement to take the medicine, and conducts teach-back to confirm that she understands how to take it. The caller alerts the PCP to the patient’s health beliefs.

### **Clarify Appointments**

Check that the patient or caregiver knows about all followup appointments (e.g., primary care followup, lab test, specialist) and their dates, times, and locations; the purpose of the appointments; and that the patient can make it to the appointments. For example, if the patient has identified a support person to assist with transportation and other logistics, find out if the patient has sought and is receiving help from that person. You will need to problem solve with the patient if there are barriers to keeping appointments.

## Coordinate Postdischarge Home Services

Check whether the patient has received home services and durable medical equipment that are scheduled and listed on the AHCP. You will need to intervene if services or equipment have not been received on time. Also check that caregivers have been available as expected. If a caregiver has not been available, explore alternatives, such as someone else who could help out or services available in the community (e.g., Meals on Wheels; spiritual leaders, clergy, or congregants).

## Discuss What To Do If a Problem Arises

Always end the call by reviewing what the patient or caregiver should do if a problem arises at any time (any hour and day of the week). Make sure patients and caregivers understand:

- What types of emergency and nonemergency situations they may encounter.
- What to do in case of an emergency.
- How to call the patient's PCP, including after hours.

## Documenting Your Call

You will need to document your calls, both for the patient's medical record and to allow hospital management to monitor the information for quality improvement purposes. For example, your hospital may identify common errors patients make and use this information to improve teaching to other patients with similar regimens or conditions. More detail for this process is included in Tool 6, "How To Monitor RED Implementation and Outcomes."

Documentation includes:

- Call attempts.
- Patient's health status.
- Problems with medicines.
- Appointment status.
- Patient's postdischarge actions.
- Followup actions you take.

You can find a sample data collection form online ([www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/)) that you can use to document your followup phone calls.

## Communicating With the Primary Care Provider

After you have completed a call, you may need to communicate with the patient's PCP. You can do this in a number of ways, such as via secure email, flag in the electronic medical record (if the PCP is part of your hospital system), fax, or phone. If you call and cannot speak directly to a medical staff person within the PCP's office, you will need to follow up with another form of communication. Commonly, secure electronic communication is the most efficient means to transmit patient information. Below are two examples of emails to alert providers.

### Communication 1: Email to Provider

Dr. Jones,

Your patient Aaron Smith was discharged from Good Care Hospital on September 17, 2012. I spoke to Mr. Smith on September 20, 2012, in order to discuss his condition and medicines.

Your patient is using two eye drops that are not listed in the discharge summary or in the outpatient medicine list. They are:

- Cosopt (Dorzolamide-Timolol): 1 eye drop twice daily
- Xalatan (Latanoprost): 1 drop into the left eye qhs

Your patient is scheduled to see you on September 27, 2012. Please feel free to contact me with any questions.

Thank you,

Barbara Sanchez, PharmD  
Good Care Hospital Department of Pharmacy  
bsanchez@goodcare.org  
Phone: 567-555-1234

### Communication 2: Email to Provider

Dr. Doe,

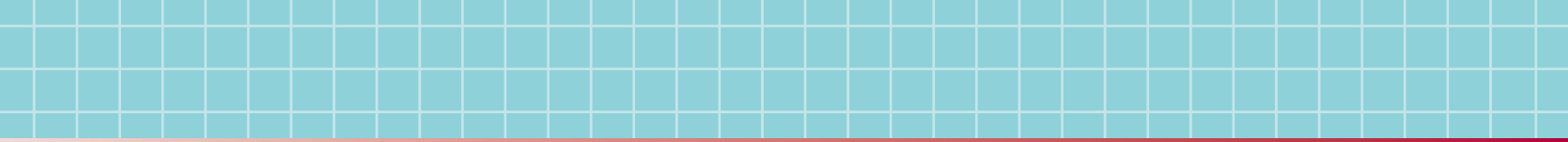
Your patient Martin Suarez was recently admitted to University Hospital. While at the hospital Mr. Suarez revealed (through a medical interpreter) that he uses a healer who considers the atorvastatin prescribed to lower his cholesterol to be harmful. A family meeting was held and the patient and his brother agreed to pass along the doctor's recommendation to continue his use of atorvastatin to the healer.

Mr. Suarez was discharged on October 19, 2012, and a nurse practitioner spoke to him on October 22, 2012, to discuss his medicines. During the call Mr. Suarez reported that he had stopped taking atorvastatin due to experiencing side effects, which to him confirmed the healer's warnings. He also reported experiencing fatigue.

Mr. Suarez is scheduled to see you on November 3, 2012. Please feel free to contact me with any questions.

Thank you,

Roger Smith, NP





# Tool 6: How To Monitor Re-Engineered Discharge Implementation and Outcomes

## Purpose of This Tool

Monitoring the RED lets you know whether each component of RED is being successfully implemented and whether your hospital is achieving the expected outcomes. This information can be used to:

- Identify and address challenges and barriers in the implementation process,
- Hold staff accountable for performance goals, and
- Justify further investments in spreading the RED.

Monitoring helps staff learn from missteps. In addition, monitoring provides opportunities for adapting the implementation process to local conditions. This tool discusses implementation and outcome measures and the way to use such data for continuous quality improvement in the area of care transitions.

## Getting Started

Form a monitoring team to develop a monitoring plan before the RED implementation begins. You may assign this responsibility to the interdisciplinary implementation team that is tasked with improving care transitions. As described in Tool 2, “How To Begin RED Implementation at Your Hospital,” the implementation team should include representatives from such disciplines as nursing, medicine, case management, and information technology.

At times, personnel such as statisticians or health economists may be needed to ensure success. Your monitoring plan will describe what measures will be collected, how frequently they will be collected, who will collect them, and how the data will be used.

## Selecting and Specifying Measures

This tool offers a menu of many different possible measures you can use to monitor the RED. You will want to choose a manageable number to track. Your measurement set does not have to be static. You may want to phase in certain measures as your implementation of the RED evolves.

You need to select a combination of implementation and outcome measures that are:

- Meaningful (understandable and important for accountability and/or quality improvement).
- Credible (based on reliable data).
- Feasible (can be produced without undue burden).
- Timely (provide information in time for corrective action and decisionmaking).

Almost all the measures in this tool are rates and are expressed as percentages. That means that both the numerator and the denominator have to be adequately specified. For many of the measures, you can use the target population as the denominator. Using this approach means you measure the implementation and impact of the RED on everyone you intended to give the RED, whether or not they in fact got the RED.

You could also use the population that is receiving any RED component as your denominator. This will allow you to measure the implementation and impact of the RED on those patients who actually receive the RED (or part of it). You may, however, find it difficult to calculate some measures using this denominator. For example, your hospital may be unable to compute outcome measures (e.g., readmission to the hospital) for only those patients who received the RED as opposed to the entire target population.

For some of the measures suggested in this tool, the appropriate denominator is actually a subset of patients who receive the RED. For example, you need to look only at patients for whom postdischarge tests have been ordered when measuring the percentage of patients for whom postdischarge tests have been scheduled.

Various organizations have suggested discharge-related measures (e.g., National Quality Forum, American College of Cardiology Hospital to Home Program, Joint American Board of Internal Medicine, American College of Physicians, and Society of Hospital Medicine Care Transitions Program). “Discharge Measures Used by Other Organizations,” at the end of this tool, has additional information about the measures and provides addresses for the organizations’ Web sites. The rest of this section of this tool will cover possible implementation and outcome measures for the RED.

## Implementation Measures

To have the desired impact, the RED must be properly implemented. It is therefore important to measure the extent of RED implementation. Implementation measures can be used to identify where the implementation process can be improved. Take, for example, RED component #2, ensuring that all patients are discharged with an appointment for posthospital followup. Monitoring the percentage of patients who leave the hospital with an appointment with a primary care provider gives an opportunity to see whether most patients are leaving with appointments, and to take corrective action if they are not.

### Is the RED Being Delivered to Target Patients?

The most fundamental implementation measure is the proportion of patients targeted to receive the RED who are actually getting it. This is true whether you are implementing the RED for your entire hospital population or for a subset of your hospital’s patients (e.g., patients with a specific condition or in a specific unit). (See Tool 2, “How To Begin the Re-Engineered Discharge Implementation at Your Hospital,” for a discussion of the options for selecting a RED target population.)

Two measures to consider are:

- Percentage of the target population receiving any RED component.
- Percentage of the target population receiving all RED components currently being implemented.

The first measure tells you the proportion of targeted patients the RED is reaching at all, while the second measure tells you how comprehensively the RED is being implemented.

## **Is the Correct Information Being Collected?**

To deliver the RED properly, the hospital (often the discharge educator, known as the DE) needs to collect information from the patient and sometimes the patient's caregiver. The following measures give an indication of whether the information needed for a re-engineered discharge is being collected.

- Percentage who were asked about language preference for oral communication, phone calls, and written materials.
- Percentage who were asked about English proficiency and need for interpreter services (of those whose language preference for oral communication is not English).
- Percentage who were asked about English proficiency and need for translation services (of those whose language preference for written materials is not English).
- Percentage who were asked about the best time for appointments.
- Percentage with whom the ability to keep appointments was discussed.
- Percentage who were asked about interest in treatment for addiction (of patients diagnosed as having addiction to tobacco, alcohol, or other substances).
- Percentage who were asked about traditional healers, treatments, and dietary supplements.
- Percentage who report that hospital staff asked whether they would have the help they needed when they left the hospital (of those who complete that survey question).
- Percentage who report that nurses always or usually listened carefully (of those who completed that survey question).

## **Is Evidence-Based Care Being Delivered?**

Several RED components are designed to ensure that the care being delivered is evidence based. The following measures examine whether both clinical treatment and the discharge are following standards and recommendations of national organizations:

- Percentage for which medication reconciliation was completed.
- Percentage for which the discharge plan has been reconciled with national guidelines.
- Percentage for which a discharge summary is delivered to the clinicians accepting care of the patient within 24 hours of discharge.
- Average time between discharge and delivery of discharge summary to the primary care provider. (Note: this measure is not a rate and therefore does not have a denominator.)

## Is Appropriate Followup Care Being Arranged?

An important part of the RED is making arrangements for posthospital care. The following are some measures of whether the hospital is making those arrangements:

- Percentage with an appointment with clinicians accepting care of the patient.
- Percentage with appointments for tests and labs (of those for whom tests and labs were ordered).
- Percentage with delivery dates for durable medical equipment (of patients needing new equipment).
- Percentage with appointments for postdischarge services (e.g., visiting nurse services) (of patients for whom postdischarge services have been ordered).
- Percentage who were provided with information for addiction treatment (of patients diagnosed as having addiction to tobacco, alcohol, or other substances).

## Are Patients Being Prepared for Discharge?

Measures of the teaching and educational components of the RED include:

- Percentage who received qualified interpreters for *all* encounters with a DE or whose DE was assessed as proficient in patient's preferred language for oral communication (of those without English proficiency).
- Percentage who got education about all diagnoses.
- Percentage who were instructed on how to take medicines (of patients prescribed medicine).
- Percentage who report that hospital staff explained the purpose of a medicine in a way that was easy to understand (of those who completed that survey question).
- Percentage who report that hospital staff explained in a way that was easy to understand how much to take of each medicine and when to take it (of those who completed that survey question).
- Percentage with plan to obtain medicines (of patients prescribed medicine).
- Percentage who got instruction on nutrition and exercise and activity limitations.
- Percentage whose ability to make scheduled appointments was confirmed.
- Percentage who were told what to do if problems arise.
- Percentage who report that written information about what symptoms or health problems to look out for after discharge was easy to understand (of those who completed that survey question).
- Percentage whose understanding of information and instructions was confirmed.
- Percentage who report that nurses explained things in a way that was easy to understand (of those who completed that survey question).
- Percentage who report that all questions were answered satisfactorily by the DE (of those who completed that survey question).
- Percentage who were told how they would get pending test results (of patients with pending test results).

- Percentage who received the AHCP.
- Percentage who received AHCP in English **and** preferred language for written materials (of patients whose preferred language for written materials is not English).

### Are Patients Receiving Postdischarge Care?

- Percentage who received postdischarge followup phone call.
- Percentage who received postdischarge followup phone call in preferred language for phone communication or with interpreter (of those whose preferred language for oral communication is not English).
- Percentage who received postdischarge followup phone call within 3 days.
- Average time between discharge and postdischarge followup phone call. (Note: this measure is not a rate and therefore does not have a denominator.)
- Percentage who strongly agree or agree that all questions about medical care were answered during postdischarge followup phone call (of those who completed that survey question).

### Selecting Implementation Measures

The preceding sections contain a broad array of measures that can help you assess how successfully you have implemented the RED. One approach to selecting from among them is illustrated in Table 1. Specifically, you may wish to select one or two measures that will enable you to assess implementation of each individual component of the RED. The table also indicates where to collect and record the relevant data.

**Table 1. Implementation Measures by RED Component**

RED Component	What To Measure	Where To Find and Record Information
1. Ascertain need for and obtain language assistance.	<ul style="list-style-type: none"> <li>• Percentage receiving needed interpreter services</li> </ul>	<ul style="list-style-type: none"> <li>• Electronic health record (EHR)</li> <li>• RED Workbook</li> </ul>
2. Make appointments for followup care (e.g., medical appointments and postdischarge tests/labs).	<ul style="list-style-type: none"> <li>• Percentage asked about best time for appointments</li> <li>• Percentage with appointment with primary care clinician</li> </ul>	<ul style="list-style-type: none"> <li>• Patient survey</li> <li>• EHR</li> <li>• RED Workbook</li> <li>• After hospital care plan (AHCP)</li> </ul>
3. Plan for followup of results from lab tests or studies that are pending at discharge.	<ul style="list-style-type: none"> <li>• Percentage getting a summary of pending tests in the AHCP</li> </ul>	<ul style="list-style-type: none"> <li>• AHCP</li> </ul>
4. Organize postdischarge outpatient services and medical equipment.	<ul style="list-style-type: none"> <li>• Percentage with arrangements being made for necessary services and equipment</li> </ul>	<ul style="list-style-type: none"> <li>• RED Workbook</li> <li>• AHCP</li> </ul>

*continued*

**Table 1. Implementation Measures by RED Component (continued)**

<b>RED Component</b>	<b>What To Measure</b>	<b>Where To Find and Record Information</b>
5. Identify the correct medicines and a plan for the patient to obtain them.	<ul style="list-style-type: none"> <li>• Percentage with medicine reconciliation completed</li> </ul>	<ul style="list-style-type: none"> <li>• RED Workstation</li> <li>• AHCP</li> </ul>
6. Reconcile the discharge plan with national guidelines.	<ul style="list-style-type: none"> <li>• Percentage with reconciliation of plan with national guidelines</li> </ul>	<ul style="list-style-type: none"> <li>• RED Workbook</li> </ul>
7. Teach a written discharge plan the patient can understand.	<ul style="list-style-type: none"> <li>• Percentage who go home with an AHCP</li> <li>• Percentage who report that all questions were answered satisfactorily</li> <li>• Percentage who report that nurses explained things in a way that was easy to understand</li> </ul>	<ul style="list-style-type: none"> <li>• RED Workbook</li> <li>• Patient survey</li> </ul>
8. Educate the patient about his or her diagnosis.	<ul style="list-style-type: none"> <li>• Percentage getting education about diagnosis</li> <li>• Percentage who could report on diagnosis postdischarge</li> </ul>	<ul style="list-style-type: none"> <li>• RED Workbook</li> <li>• Followup phone call documentation</li> <li>• Patient survey</li> </ul>
9. Review with the patient what to do if a problem arises.	<ul style="list-style-type: none"> <li>• Percentage educated about what to do about problems</li> </ul>	<ul style="list-style-type: none"> <li>• RED Workbook</li> <li>• Followup phone call documentation</li> </ul>
10. Assess the degree of the patient's understanding of the discharge plan.	<ul style="list-style-type: none"> <li>• Percentage whose understanding was confirmed</li> </ul>	<ul style="list-style-type: none"> <li>• RED Workbook</li> <li>• Patient survey</li> </ul>
11. Expedite transmission of the discharge summary to clinicians accepting care of the patient.	<ul style="list-style-type: none"> <li>• Time between discharge and transmission of summary to followup clinician</li> </ul>	<ul style="list-style-type: none"> <li>• RED Workbook</li> </ul>
12. Provide telephone reinforcement of the discharge plan.	<ul style="list-style-type: none"> <li>• Percentage of people called within 2 to 3 days of discharge</li> <li>• Percentage of calls completed</li> </ul>	<ul style="list-style-type: none"> <li>• RED Workbook</li> <li>• Followup phone call documentation</li> </ul>

## Outcome Measures

Once the RED has been fully implemented, it can be expected to have an impact on a number of outcomes. These outcomes include:

- Reduced hospital reutilization (i.e., patients returning to the hospital shortly after discharge),
- Improved connections with primary care and other providers,
- Increased knowledge for self-management, and
- Increased patient satisfaction.

In addition to monitoring for expected results of implementing the RED, you need to monitor for unintended consequences. For example, in the clinical trial of the RED, the average time of discharge was monitored. When it was discovered that discharges were occurring 30 minutes later in the day after the RED was introduced, RED implementers were able to modify RED processes to

complete discharge at the same time of day as before RED implementation. Length of stay is another measure you may want to monitor to catch unintended consequences.

In addition to generating outcome measures for patients targeted to receive or receiving the RED, you may want to generate measures for a comparison group. A comparison group might be patients in a similar hospital or comparable patients in your hospital who are not receiving the RED. Finding differences between RED and non-RED patients will add to your confidence that the RED was in fact responsible for changes in outcome measures observed over time.

## Hospital Reutilization Measures

Most hospitals focus on the use of hospital services in the 30 days following discharge. While you could choose to evaluate the RED on whether it averts hospital reutilizations related to the original primary diagnosis, the comprehensiveness of the RED means it should be able to have an impact on 30-day all-cause hospital reutilization.

Furthermore, the Centers for Medicare & Medicaid Services (CMS) uses disease-specific risk-adjusted 30-day all-cause readmission rates when gauging excess hospital readmission. CMS currently reduces payments to hospitals with excess readmissions for three conditions: acute myocardial infarction, heart failure, and pneumonia. There are plans to expand beyond this “starter set” in the next few years.

The rates that you calculate will differ from CMS’s rates because they will not be risk adjusted and will not include readmissions to other hospitals. (For more information on how CMS calculated readmission rates, see “How CMS Measures the ‘30-Day All-Cause Rehospitalization Rate’ on the Hospital Compare Web Site” at the end of this tool). If you want to try to capture your patients’ postdischarge use of other hospitals, you can use patient surveys. These reports, however, rely on patients’ recall of what hospital services they used in the 30 days after leaving the hospital.

Common measures of 30-day all-cause hospital reutilization are percentages of patients with:

- All-cause readmissions (admission >24 hours) within 30 days of discharge.
- All-cause observations (admission <24 hours) within 30 days of discharge.
- All-cause emergency department visits within 30 days of discharge.
- All-cause urgent care visits within 30 days of discharge.

These rates can be reported separately or in combination.

Consider examining reutilization rates by subsets to identify important opportunities for improvement. For example, if a specific nursing home was shown to have high rates of what appear to be avoidable events, your hospital could work with the nursing home to determine the source of this problem and take corrective action. The report *Health Care Leader Action Guide To Reduce Avoidable Readmissions*<sup>1</sup> suggests that hospitals could examine readmissions data in the following ways:

- **Rates for different conditions:** To the extent feasible, examine readmission rates by diagnosis and significant comorbidities, and look for correlation with the patient’s severity.
- **Rates by practitioner:** Examine the rates by physician, physician group, and service to determine if the patterns of readmissions are appropriate or if any type of practitioner or groups/services are associated with an unexpected readmission rate or trend for certain diagnostic groups.

- **Rates by readmission source:** Examine the rates by readmission source (e.g., home, nursing home) to determine the places from which patients are most often being readmitted.
- **Rates at different times:** Examine readmissions within a given time period, such as 7, 30, 60, and 90 days. Examining a shorter timeframe may bring to light issues more directly related to hospital care or flaws in the process of transitioning the patient to the ambulatory setting. Examining the longer timeframe may reveal issues with followup care and patients' understanding of self-care or the hospital's ability to arrange posthospital care.
- **Rates by sociodemographics:** Examine readmissions by race, ethnicity, neighborhood (ZIP Code), and language preference to identify disparities and the adequacy of language and cultural services for patients throughout the transition process.
- **Rates by insurance:** Examine readmissions by insurer type to ensure the appropriate use of benefits and identify the ways patients may be guided to optimize their benefits.

If outliers are identified, you may want to conduct a root cause analysis to figure out why they are experiencing high rates. (More information is available in the section below on root cause analysis.)

## Connections With Outpatient Providers

Research shows that patients who return to the hospital often have not seen a clinician since they left the hospital.<sup>2</sup> One of the most important components of the RED is that all patients go home with a followup appointment made in such a way that there is a good chance they will keep it.

As described in Tool 3, “How To Deliver the Re-Engineered Discharge,” the DE works with the patient to identify a date and time that the patient can attend a posthospital followup appointment. To monitor how successful your hospital has been in arranging an appointment that the patient can keep, you can measure:

- Percentage who completed an appointment with their medical provider (of those who completed that survey question).

## Knowledge for Self-Management

An important objective of the RED is to teach patients how to take care of themselves when they get home. The postdischarge followup phone call provides an opportunity to monitor whether teaching done in the hospital has improved the patients' knowledge of how to self-manage their conditions. Possible measures include:

- Percentage who correctly report during postdischarge followup phone call the reason for their hospital visit (of those who completed a postdischarge followup phone call).
- Percentage who correctly report during postdischarge followup phone call the symptoms to watch out for or things to do for their condition (of those who completed a postdischarge followup phone call).
- Percentage who correctly report during postdischarge followup phone call how to take their medicines (of those who completed a postdischarge followup phone call and had prescribed medicines).



## Patient Satisfaction

The RED is designed to improve communication, which in the RED trial was shown to improve overall patient satisfaction. Measures of patient satisfaction with hospitals include:

- Percentage who rate hospital a 9 or 10 on a 1 to 10 scale (of those who completed that survey question).
- Percentage who would probably or definitely recommend your hospital to friends and family (of those who completed that survey question).
- Percentage who report nurses always or usually treated them with courtesy and respect (of those who completed that survey question).
- Percentage who report doctors always or usually treated them with courtesy and respect (of those who completed that survey question).

## Collecting Data

Your monitoring plan will specify who will collect data and how data for each measure will be collected. This section of the tool discusses the various sources of data you can use to calculate measures. Expect to modify your data collection to generate the measures that you choose.

## RED Workbooks and Contact Sheets

Much of the data for monitoring RED implementation can be collected and recorded in the DE's Workbook. You can find a copy of the Workbook online ([www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html)). If your hospital is not using the RED Workstation, you will have to manually calculate the measures using a spreadsheet. This can be done by conducting a chart review for at least 10 percent of RED patients, defined either as patients receiving any RED component or as the entire target population that was supposed to receive the RED, whether or not they received any RED components.

## Electronic Health Records and the RED Workstation

Some data needed for calculating measures will be available from your hospital's EHRs (if you have EHRs). For example, if your hospital routinely collects language preference data at admission, the measure of the percentage of patients asked about language preferences could be generated by using EHRs.

If your hospital is entering data from the Workbook into a RED Workstation, the Workstation can be programmed to generate many of the implementation measures automatically. The RED Workstation can also be linked to your EHR system so that it can pull data needed for measure calculation.

## Patient Surveys

Some measures, such as the patient satisfaction measures, require gathering data from patients after discharge. The patient survey should be conducted shortly after discharge (e.g., within 6 weeks). You can add questions to patient surveys your hospital already conducts to assess patient experiences and

satisfaction with care if you implement the RED with your hospital's entire patient population. If, however, you implement the RED with a subset of patients, these anonymous surveys will not allow you to distinguish between RED patients and others. Therefore, you will need to field a separate patient survey to monitor the RED.

You can administer the surveys by mailing a survey to the patient after discharge or by administering the survey by phone. Mail surveys are less expensive but typically have low response rates. You may therefore choose to conduct telephone followup with patients who do not respond to a mail survey.

Online at [www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/](http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html/) are mail and phone versions of a survey that will assist you in collecting data from patients. These surveys do not capture all the data needed to calculate all the measures listed in this tool, but you can individualize the survey for your hospital to reflect your priorities and goals. A number of the survey items were developed for HCAHPS®, the hospital survey of patients' experience of care, and have been validated as part of the CAHPS® development process. (CAHPS is the Consumer Assessment of Healthcare Providers and Systems, and HCAHPS is the hospital version.)

## Measurement Timing and Frequency

When and how often you want to generate RED measures will depend on the measure, the amount of progress you have made in implementing the RED, and the level of effort it takes to generate the measure.

For outcome measures, it is useful to get a baseline measurement, that is, to calculate the measure before RED implementation begins. Ideally, you will calculate outcome measures for an extended time (e.g., the year before implementation) rather than only at one point in time (e.g., the month before implementation). You may then be able to identify seasonal variations or trends over time that will help you interpret your measures after RED implementation.

Subsequent calculations of outcome measures will depend on how quickly you expect the measure to respond to the RED. Set reasonable expectations for improvement. It will take a while before the RED is fully and properly implemented, so there will be a lag in measurable results. For example, you should see an impact on patient satisfaction among those who receive the RED almost immediately, but the impact on the overall hospital patient satisfaction scores depends on the percentage of the hospital's patients that receives the RED.

Consider producing outcome measures that can be generated using electronic data on a monthly basis and track changes over time as well as differences from baseline. You may want to produce outcome measures that require patient surveys or spreadsheet calculations less frequently. You can, however, reduce the burden of producing those measures by using only a sample, rather than the universe, of RED patients.

Implementation measures can be calculated as soon as 30 patients have received the RED. At first, you will need to generate these very frequently (e.g., every other week). If electronic data cannot be used, you can generate these measures using a small sample of patients. The idea, however, is to generate these measures quickly so they can be used for continuous quality improvement.

As the RED matures, you may want to reduce the frequency of measurement. For example, once it has been determined that the RED components have been fully integrated into standard operating procedures, you may want to generate the measures that monitor those components infrequently

or even drop them from the measurement set. Once a steady state has been reached, you may want to harmonize the intervals for RED outcome measurement with other key quality measures your hospital monitors.

## Other Means of Monitoring the RED

Qualitative methods can be useful to monitor RED implementation and outcomes and develop strategies for quality improvement.

### Root Cause Analysis

Root cause analysis is the study of when things go wrong to identify ways bad outcomes can be prevented. The goal is to identify underlying trouble that increases the likelihood of problems while resisting the urge to focus on mistakes by individuals.<sup>3-5</sup>

You start by identifying patients who have experienced a bad outcome, such as an avoidable readmission. Using a systematic approach, such as conducting chart reviews and structured interviews with patients, DEs, and other providers, you will uncover the underlying failures in the care process. Ideally, you will select cases from several different clinical units and include patients with varying diagnoses.

After you conduct a series of root cause analyses, you are likely to understand where processes are breaking down. If you conduct such analyses at least monthly during RED implementation, the findings will provide valuable feedback about times when the RED process is not working and advice about how to adapt the RED processes for your hospital. These monthly discussions can also generate enthusiasm for an organizational culture that emphasizes the importance of improving transitions of care.

### Discharge Educator Help Line Logs

The logs that DEs keep of patients who call the help line can help identify systematic problems. The RED Workstation can identify patterns in reports of:

- Postdischarge unanticipated problems.
- Postdischarge areas of confusion or uncertainty.
- Need for additional social support services.

### Direct Observation

Many measures of RED implementation rely on staff self-report in the Workbooks and contact sheets. To augment these reports, direct observation by staff overseeing the delivery of the RED can give insight into implementation glitches.

## Taking Action

Monitoring the RED improves outcomes only if staff review the results and take action. Forums for reviewing RED monitoring data include:

- Weekly meetings of DE and other members of the frontline RED clinical team.
- Monthly meetings of the RED implementation team.
- Reviews of other key quality indicators (e.g., hospital board meetings, quality committees).
- Senior management resource allocation meetings.

When areas for improvement are identified, rapid-cycle, continuous quality improvement methods can be implemented to improve care delivered by individual providers, units, and systems. Once a process that needs improvement is identified, a team representing various stakeholders is gathered to understand the process and learn what can be done. Action to prevent future failures involves reaching consensus for what changes are needed, setting goals, transforming processes and educating staff, and measuring results. If necessary, the implementation plan may be revised based on the results so that improvement is ongoing.

## Summary

Developing a monitoring plan as suggested in this tool will help you identify what is going well and what needs to be improved. Monitoring the RED implementation measures lets you know whether you are successfully implementing the components of the RED, and monitoring the outcome measures tells if you are achieving the expected results. Collecting data should be limited to only that information that will help you determine if you are achieving the goals that you set for your hospital in the area of transitions in care.

# Discharge Measures Used by Other Organizations

## National Quality Forum Safe Practice Discharge Measures

The principles of the RED program were incorporated into the National Quality Forum (NQF) Safe Practice as being essential for delivery of a safe and effective hospital discharge. The components of the NQF Safe Practice were harmonized with the recommendations of the Joint Commission, the Leapfrog Group, Centers for Medicare & Medicaid Services (CMS), the Institute for Healthcare Improvement, and others and mirror the components of the RED program.<sup>6</sup>

The NQF Safe Practice does not target the rehospitalization rate as a key indicator, but identifies a key set of intermediate process variables leading toward rehospitalization. These performance measures do not all address external reporting requirements, but are suggested to support internal health care organization quality improvement efforts. The measures endorsed by the NQF are listed below.

- **Outcome measures** include reduction in direct harm associated with adverse events and treatment misadventures, including death, disability (permanent or temporary), adverse drug events, or preventable harm requiring further treatment; missed diagnoses and delayed treatment; and inaccessible prior test information and medical records.
- **Process measures** include the percentage of discharge summaries received by accepting practitioners; the number of patients who have and attend a posthospital followup appointment; and the timeliness of receipt and discussion of posthospital followup tests with the accepting provider.
- **Home management plan of care document given to patient/caregiver** requires that documentation exists that the home management plan of care (HMPC), as a separate document, specific to the patient, was given to the patient/caregiver prior to or upon discharge.
- **Structure measures** include verification of the existence of a systematic hospital discharge performance improvement program and explicit organizational policies and procedures addressing communication of discharge information; verification of educational programs; and the existence of formal reporting structures for accountability across governance, administrative leadership, and frontline caregivers.
- **Patient-centered measures** include surveys of patient satisfaction about hospital discharge at the time of and after discharge. The NQF-endorsed HCAHPS® survey includes two relevant measures: “During your hospital stay, did hospital staff talk with you about whether you would have the help you needed when you left the hospital?” (Q19); and “During your hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?” (Q20). Additional self-report surveys, such as the 3-Item Care Transition Measure (CTM-3), may be considered as well.

## American College of Cardiology H2H (Hospital to Home) Program

Another organization that has set a specific target for rehospitalization rate improvement is the initiative that is co-led by the American College of Cardiology and the Institute for Healthcare Improvement. Other strategic partners include specialty societies, nursing organizations, hospital associations, integrated health systems, payers and patients, and family caregivers. The focus of this

program is on medication management postdischarge, early followup, and symptom management. The overall goal of the H2H initiative is to reduce all-cause readmission rates among patients discharged with heart failure or acute myocardial infarction by 20 percent. The Web site is available at [www.h2hquality.org/](http://www.h2hquality.org/).

### **ABIM, ACP, SHM Care Transitions Performance Measurement Set**

The American Board of Internal Medicine Foundation, American College of Physicians, and Society of Hospital Medicine have released the *Physician Consortium for Performance Improvement® - Care Transitions Performance Measurement Set*.<sup>7</sup> This document lists key measures of success in improving outcomes, including:

- Reduction in adverse drug events.
- Reduction in patient harm related to medical errors of omission and commission.
- Reduction in unnecessary health care encounters (e.g., 30-day all-cause hospital readmissions).
- Reduction in redundant tests and procedures.
- Achievement of patient goals and preferences (e.g., functional status, comfort care).
- Improved patient understanding of and adherence to treatment plan.

### **CMS Safe Transitions Program Technical Expert Panel Recommendations**

The CMS Community-Based Care Transitions Program<sup>8,9</sup> has implemented demonstration projects in 14 Quality Improvement Organizations (QIOs) in 14 States representing more than 1 million beneficiaries. As part of this effort, the Technical Expert Panel (TEP) on Benchmarking of Hospital Discharge was formed to study and make recommendations about transition measures. The final report assists hospitals to understand how CMS is approaching the issue of rehospitalization measures.

The measures the TEP recommended include:

- Patient satisfaction.
- Standardized elements of discharge process.
- Scheduling of followup visit.
- Elements of transition.
- All-cause 30-day readmission rates.
- Intervening physician visits among those readmitted.

The TEP identified the following examples of optimal measures for hospital discharge transitions. The expected rates of improvement are shown in Table 1.

- 30-day readmission rate.
- 30-day all-cause risk standardized readmission rate following congestive heart failure (CHF), acute myocardial infarction (AMI), and pneumonia.

- Percentage of patients who rate hospital performance meeting HCAHPS performance standard for discharge information and information about medicines.
- Percentage of patients readmitted  $\leq 30$  days not seen by a physician between discharge and readmission.
- Percentage of care transitions in the targeted area for which interventions show improvement.

**Table 1. Expected rates of improvement**

Measure	Expected Improvement
30-day readmissions	2 percentage points
AMI, CHF, and pneumonia 30-day readmissions	2 percentage points for one of these measures
HCAHPS measures	8 percent reduction in failure rate
MD visit between admission and readmission	8 percent reduction in failure rate
Percentage of care transitions for which interventions show improvement	1 or more interventions, affecting at least 10 percent of transitions

It appears that 30-day all-cause rehospitalization rates will be a key measure. For the purpose of quality improvement, the raw rates of rehospitalization are probably sufficient. However, when hospitals are compared in the public domain or for purposes of reimbursement, then risk adjustments are necessary (see “How CMS Measures the ‘30-Day All-Cause Rehospitalization Rate’ on the Hospital Compare Web Site” at the end of this tool). If readmission rates are to be a key measure, then it is important that the definition be clear and the calculation of this rate be consistent. Although there is not yet a national consensus, the TEP suggested:

- Including those discharged from short-term acute care facilities in the denominator.
- Including readmission to an acute care hospital or having observation stay within 30 days of index hospital discharge, whether planned or unplanned, in the numerator.
- Excluding patients who died during index hospitalization.
- Excluding emergency department visits from the numerator or denominator.
- Treating admission to and from chronic care facilities like any other hospitalization.
- Including all payers, including all Medicare beneficiaries.
- Tracking the proportion of readmissions to same versus other hospitals.
- Using current risk-standardized measures (see “How CMS Measures the ‘30-Day All-Cause Rehospitalization Rate’ on the Hospital Compare Web Site” at the end of this tool).
- Refraining from using unadjusted measures to compare hospitals to each other.

The TEP also recommended that the calculation of physician followup include:

- Beneficiaries in community ZIP Code with a readmission to short-term acute care facility (including chronic care facilities) within 30 days of index hospital discharge in the denominator.
- The presence of any Part B evaluation and management (E&M) code between discharge and readmission in the numerator.

## How CMS Measures the “30-Day All-Cause Rehospitalization Rate” on the Hospital Compare Web Site

Each hospital’s 30-day risk-standardized readmission rate (RSRR) is computed in several steps. First, the predicted 30-day readmission for a particular hospital obtained from the hierarchical regression model is divided by the expected readmission for that hospital, which is also obtained from the regression model. Predicted readmission is the number of readmissions (following discharge for heart attack, heart failure, or pneumonia) that would be anticipated in the particular hospital during the study period, given the patient case mix and the hospital’s unique quality of care effect on readmission. Expected readmission is the number of readmissions (following discharge for heart attack, heart failure, or pneumonia) that would be expected if the same patients with the same characteristics had instead been treated at an “average” hospital, given the “average” hospital’s quality of care effect on readmission for patients with that condition.

This ratio is then multiplied by the national unadjusted readmission rate for the condition for all hospitals to compute an RSRR for the hospital. So, the higher a hospital’s predicted 30-day readmission rate, relative to expected readmission for the hospital’s particular case mix of patients, the higher its adjusted readmission rate will be. Hospitals with better quality will have lower rates.

The formula follows:

$(\text{Predicted 30-day readmission} / \text{Expected readmission}) * \text{U.S. national readmission rate} = \text{RSRR}$

For example, suppose the model predicts that 10 of Hospital A’s heart attack admissions would be readmitted within 30 days of discharge in a given year, based on their age, gender, and preexisting health conditions, and based on the estimate of the hospital’s specific quality of care. Then, suppose that the expected number of 30-day readmissions for those same patients would be higher—say, 15—if they had instead been treated at an “average” U.S. hospital. If the actual readmission rate for the study period for all heart attack admissions in all hospitals in the United States is 12 percent, then the hospital’s 30-day RSRR would be 8 percent.

$$\text{RSRR for Hospital A} = (10/15) * 12\% = 8\%$$

If, instead, 9 of these patients would be expected to have been readmitted if treated at the “average” hospital, then the hospital’s readmission rate would be 13.3 percent.

$$\text{RSRR for Hospital A} = (10/9) * 12\% = 13.3\%$$

In the first case, the hospital performed better than the national average and had a relatively low RSRR (8 percent); in the second case, it performed worse and had a relatively high rate (13.3 percent).

Hospitals with relatively low-risk patients whose predicted readmission is the same as the expected readmission for the average hospital for the same group of low-risk patients would have an adjusted readmission rate equal to the national rate (12 percent in this example). Similarly, hospitals with high-risk patients whose predicted readmission is the same as the expected readmission for the average hospital for the same group of high-risk patients would also have an adjusted readmission rate equal to the national rate of 12 percent. Thus, each hospital’s case mix should not affect the adjusted readmission rates used to compare hospitals.



**Adjusting for Small Hospitals or a Small Number of Cases.** The hierarchical regression model also adjusts readmission rate results for small hospitals or hospitals with few heart attack, heart failure, or pneumonia cases in a given reference period. This reduces the chance that such hospitals' performances will fluctuate wildly from year to year or that they will be wrongly classified as either a worse or a better performer. For these hospitals, the model not only considers readmissions among patients treated for the condition in the small sample size of cases, but pools together patients from all hospitals treated for the given condition, to make the results more reliable.

In essence, the predicted readmission rate for a hospital with a small number of cases is moved toward the overall U.S. national readmission rate for all hospitals. The estimates of readmission for hospitals with few patients will rely considerably on the pooled data for all hospitals, making it less likely that small hospitals will fall into either of the outlier categories. This pooling affords a “borrowing of statistical strength” that provides more confidence in the results. For classifying hospital performance, extremely small hospitals will be reported separately.

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