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

8. 1. 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[1,2]:

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.

9. 2. Eleven Steps To Implement the Re-Engineered Discharge

10. 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 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.

11. 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.

Trouble shooting 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.[3] 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. (If your hospital does not have an interpreter services program, include a representative of those providing interpretation at the hospital.)

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.

12. 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[4] and Mary Naylor.[5]

13. 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.[6] 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,[7,8] substance abuse,[9] no followup with a primary care provider, and male gender[10] 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.[11] These factors could be assessed on admission and could be useful in identifying patients at high risk of readmission.[12]

14. 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.[13-18] 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'[19] mapping standard that is widely used in manufacturing and increasingly popular in office and service environments.

15. 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.

16. 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 below will assist you in thinking about how each component will be addressed.

Table 1. RED Staff Assignment Planning Chart

RED Component	Person Responsible
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.	

17.

18. 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. Appendix A contains an example of an agenda for a 1-day training that would take place at your hospital. 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/qual/projectred. 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/qual/literacy/.

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.

19. 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.

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.

Integrating 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.

20. 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.

21. 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.”

22. References

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23. Appendix. Sample Training Agenda

Some hospitals might benefit from onsite training about how to carry out the details of 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 Project RED**	
	Objectives: Introduce the patient safety and public policy issues Review the scientific evidence for Project RED research Describe factors related to the "business case" for hospitals Discuss the important role of the senior leaders	
10:20 – 10:30	**Break**	
10:30 – 12:15	**Discharge Educator Training**	
	Objectives: Understand the components of the RED Understand the discharge educator role Review the implementation tools Review specific culturally appropriate actions for RED components	
12:15 – 1:00	**LUNCH**	
1:00 – 2:30	**How Will Your Hospital Implement the RED?**	
	Objectives: Discuss implementation and workflow plan Review hospital's challenges: Hospital related Patient related Medical team related Develop strategies to overcome challenges Review hospital's next steps in implementing Project RED	
2:30 – 3:30	**Workstation Training**	
	Objectives: Understand the connection between the DE Workbook and the Workstation Learn how to use the Workstation to document the discharge plan and to create the After Hospital Care Plan (AHCP)	
3:30 – 3:45	**Break**	
3:45 – 4:30	**Postdischarge Followup Phone Call**	
	Objectives: Understand the importance of the followup phone call Learn to conduct the preparation steps Learn to conduct appropriate postcall actions	
4:30 – 5:30	**How To Measure RED Implementation and Outcomes**	
	Objectives: Introduce measurable implementation and outcome indicators Review specific measures for each RED component Discuss goals and using measures to inform continued quality improvement	