Re-Engineered Discharge (RED) Toolkit

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Tool 1: Overview

2. 1. Purpose of the Toolkit

A variety of forces are pushing hospitals to improve their discharge processes to reduce readmissions.[1] Researchers at the Boston University Medical Center (BUMC) developed and tested the Re-Engineered Discharge (RED). Research showed that the RED was effective at reducing readmissions and posthospital emergency department (ED) visits.[2]

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.

3. 2. 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,[3-7] which is currently at a rate of almost 1 in 5 for patients covered by Medicare.[8] 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.[9] 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.[10,11]

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 result of hospitals' failure to ensure an effective transition has included adverse events, high readmission rates, and high ED visit rates.[8,12,13] 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.[14] 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 has included a theme titled Patient Pathways (Care Transitions). The goal of this theme is 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.[15]

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.[16] 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).[17]

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 starting October 1, 2012, Medicare will reduce payments to hospitals with "excess readmission rates" for heart attacks, heart failure, and pneumonia.[18]

4. 3. What the RED Is

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.[19-21]

5. 4. 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.[22] The RED, however, has shown significant effects in a randomized controlled trial.[2]

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.

6. 5. 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 RED 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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