Patients who have a clear understanding of their after-hospital care instructions, including how to take their medicines and when to make follow-up appointments, are 30 percent less likely to be readmitted or visit the emergency department than patients who lack this information, according to a new study funded by the Agency for Healthcare Research and Quality (AHRQ). The study is published in the February 3, 2009, issue of the Annals of Internal Medicine.

Fewer hospital readmissions and emergency department visits also translate to lower total costs. The study found that total costs (a combination of actual hospitalization costs and estimated outpatient costs) were an average of $412 lower for the patients who received complete information than for those who did not.

Currently, one in five patients has a complication or an adverse event, such as a drug interaction, after being discharged from the hospital. These can impair patients' recovery and can cause patients a trip to the emergency department or to be readmitted to the hospital, both of which are costly.

One reason why patients have adverse events after they leave the hospital is a lack of understanding about their follow-up care, such as which medications to take or how to take care of their condition. This information is contained in a discharge summary, a standard document that previous studies have shown hospitals often do not make available to patients' primary care doctors in a timely fashion.

"Because a hospital stay can be a confusing and stressful time for patients, it's important that clinicians make sure patients are prepared to leave the hospital understanding the information they need to recover at home," said AHRQ Director Carolyn M. Clancy, M.D. "This study shows us that, with some planning, hospitals can better prepare their patients to avoid complications and reduce unnecessary and costly readmissions."

The research team, led by Brian W. Jack, M.D., at Boston University Medical Center's Department of Family Medicine, developed a multi-faceted program to educate patients about their post-hospital care plans.

It is called the Re-Engineered Hospital Discharge Program, or RED, and it was tested through a randomized controlled trial. The program
used specially trained nurses to help one group of patients arrange follow-up appointments, confirm medication routines, and understand their diagnoses using a personalized instruction booklet. A pharmacist contacted patients between two and four days after hospital discharge to reinforce the medication plan and answer any questions.

Thirty days after their hospital discharge, the 370 patients who participated in the RED program had 30 percent fewer subsequent emergency visits and readmissions than the 368 patients who did not. Nearly all (94 percent) of the patients who participated in the RED program left the hospital with a follow-up appointment with their primary care physician, compared to 35 percent for patients who did not participate. And nearly all (91 percent) participants had their discharge information sent to their primary care physician within 24 hours of leaving the hospital.

However, making medication review available to patients did not prevent problems from occurring, the study noted. Nearly two-thirds (65 percent) of the RED program participants who completed the medication review with the pharmacist had at least one problem with their drugs. In half of those cases, the pharmacist needed to take corrective action, such as contacting the patient's doctor.

Despite the patient safety and cost benefits, a lack of financial incentives to implement a discharge program such as this poses a barrier to widespread adoption among hospitals, the study authors noted. However, the growing importance to hospitals of demonstrating their quality performance could spur added interest in this type of program.

AHRQ also is supporting ongoing research by Dr. Jack and his colleagues that is testing the automation of the reengineered hospital discharge principles reflected in the RED program.

For more information, please contact AHRQ Public Affairs: (301) 427-1859 or (301) 427-1855.