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Fewer Blood Transfusions Reduce Hospital Infections

Red blood cell (RBC) transfusion strategies are a common treatment in the U.S., but infection rates dropped by 20 percent when hospitals performed them less often, information that could help save hospitals money on infection-related costs, according to a [study](#) published in the *Journal of the American Medical Association*. Each infection typically requires an extra \$50,000 to treat, and many infected patients are already seriously ill.

Researchers studied 18 randomized clinical trials with restrictive versus liberal RBC transfusion strategies that included a total of 7,593 patients. They found that incidence of healthcare-associated infections such as pneumonia, mediastinitis, wound infections and sepsis was 11.8 percent in the restrictive group and 16.9 percent in the liberal group, according to the study.

Most trials define a restrictive transfusion strategy as the administration of RBCs once hemoglobin falls below either 7 or 8 g/dL, and most trials define a liberal strategy as the administration of RBCs once hemoglobin level falls below 10 g/dL, according to an accompanying [article](#) in *JAMA*.

The risk ratio for the association between transfusion strategies and serious infection was .82, and the number needed to treat within restrictive strategies was 38 patients, according to the study. Infection risk remained low within restrictive strategies, even with leukocyte reduction. Risk ratio was .70 among orthopedic surgery patients and .51 for sepsis patients.

However, there were no significant differences in the incidence of infection by RBC threshold for patients with cardiac disease, the critically ill, those with acute upper gastrointestinal bleeding or infants with low birth weight, researchers found. Restrictive RBC transfusion strategies have helped hospitals lower incidence of HAIs, the study concluded.

Case Study: Boston Hospital Implements New Program to Reduce Readmissions

In 2012, Beth Israel Deaconess Medical Center in Boston found out it had one of the highest rates of readmissions among Medicare patients in the country. That meant federal fines of more than \$1 million.

The hospital was providing quality care to patients when they were in the hospital, but it turned out that focus was too narrow so with a \$5 million grant the hospital developed the Post-Acute Care Transitions (PACT) Program.

The idea behind the program is to keep Medicare patients from bouncing in and out of the hospital. Studies show that about 30 percent of elderly patients return to the hospital within 30 days of being discharged.

Through PACT, nurses and pharmacists now track Medicare patients who are at high risk for readmission. Nurses call patients and their caregivers, communicate with a patient's primary care provider and arrange for rehabilitation or visiting nurses. Pharmacists also are on hand to answer medication questions.

So far Beth Israel Deaconess has reduced its readmission rate by 25 percent and its fines also have been reduced. Through PACT, the hospital is now providing better care for its older patients.

Save the Date

Please note: While the information below is a list of planned programs for 2014, at this time not all programs can be accessed online for registration.

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| May 8 | Preventing Readmissions and Improving Transitions in Care (co-provided with HQSI) |
| May 13 | CUSP for ESRD in New Jersey |
| May 20 | Reducing Healthcare-Acquired Infections Using a Collaborative Approach |
| June 9 | Statewide Mother Baby Summit |
| Sept. 18 | Adverse Drug Events |
| Sept. 29, 30 | Geriatric Emergency Department Guidelines |

[Click here to register.](#)

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