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## Hospital-based Clinic Reduces Visits from ED Super Users

A clinic-based multidisciplinary team helped reduce frequent emergency department (ED) user visits at a Gainesville, Fla., hospital, according to a [study](#) by the University of Florida.

After intervention from the Care One Clinic, patients the hospital admitted more than eight times the previous year saw relative risk reductions of 22 percent for ED use, 30 percent for hospitalizations and 24 percent for days spend in the hospital, according to the study.

Researchers examined the hospital's electronic medical records and found 473 patients accounted for 5,728 ED visits and 2,044 hospitalizations. Of those patients, 147 participated in the study--only 1 percent of whom had private insurance. Clinic staff examined patients, then assigned them a social worker who provided transportation assistance, gave them access to community resources and performed a literacy screening.

Patients then met with a doctor, as well as a pain and addiction psychiatrist, and finally with a clinical pharmacist for medication reconciliation, medication compliance assessment and patient education.

The Care One Clinic included pain and addiction management and pharmacist-led counseling, and led to a direct cost reduction of \$4,000 per patient a year. ED visits fell from 4.9 to 3.8 per Care One patient, hospitalizations dropped from 3 to 2.1 and days spent in the hospital fell from 3.8 to 2.9, compared to the six months before the program, the study stated.

Many frequent ED users suffer from addiction, pain, mental illness, homelessness and have a variety of very difficult to treat problems. This population needs time to treat these deeper problems, and schedule these patients properly to provide care at a more in-depth level, the study concluded.

## During Surgery, Recycling a Patient's Lost Blood is better than Using Banked Blood

Patients whose own red blood cells are recycled and given back to them during heart surgery have healthier blood cells better able to carry oxygen where it is most needed compared to those who get transfusions of blood stored in a blood bank, according to results of a small [study](#) at Johns Hopkins.

The study found that the more units of banked blood a patient received, the more red cell damage was observed. The damage renders the cells less flexible and less able to squeeze through a body's smallest capillaries and deliver oxygen to tissues. Among patients who received five or more units of red blood cells from a hospital blood bank during the study, the damage persisted for at least three days after surgery. In the past, studies have linked transfusions to increased risk of hospital-acquired infections, longer hospital stays and increased risk of death.

According to the study, fresh blood cells are of a higher quality than what comes from a blood bank. If banked blood, which is stored for up to six weeks, is now shown to be of a lower quality, it makes more sense to use recycled blood that has only been outside the body for one or two hours.

To recycle the blood, a machine known as a cell saver is used to collect what a patient loses during surgery, rinse away unneeded fat and tissue, and then centrifuge and separate the red cells, which are then returned to the patient should he or she need it. Disposable parts of the cell saver, which can be used to process multiple units of blood, cost around \$120, compared to \$240 for each unit of banked blood.

For the study, the Johns Hopkins researchers categorized 32 cardiac surgery patients by their transfusion status: those who received only their own recycled red blood cells (12 patients), those who received their own blood plus fewer than five units of banked blood (10) and those who received their own blood plus five or more units of stored blood (10). All had blood samples drawn before, during and for three days after surgery. The samples were examined for blood cell membrane stiffness and flexibility, a measure of how well oxygen is likely to get to where it is needed.

In patients who received only their own recycled blood, their cells behaved normally right away, as if they had never been outside the body. The more blood a patient got from the bank, the less flexible their entire population of red blood cells. Three days after surgery, the red blood cells in the group that got the largest number of transfused units still had not recovered their full function.

By using the cell saver as a primary method of blood conservation, these patients to do just as well or better than patients who get transfusions of donated blood. Preliminary findings suggest patients who avoid banked blood develop fewer hospital-acquired infections.

## **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.

May 20	Reducing Healthcare-Acquired Infections Using a Collaborative Approach
June 3	Pressure Ulcer Prevention and Reduction Strategies
June 9	Statewide Mother Baby Summit
June 10	End-of-Life Nursing Education Consortium
June 18	TeamSTEPPS Train the Trainer

Sept. 18      Adverse Drug Events  
Sept. 29      Geriatric Emergency Department Guidelines

[Click here to register.](#)

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