



CKD Quality Initiative

CKD UPDATE

APRIL 2011

April is National Minority Health Month!



African-Americans make up about 12 percent of the American population, but represent 28 percent of the population with renal failure. The majority of renal failure cases in this community can be attributed to diabetes and hypertension. This is why it is important to test people with diabetes for kidney disease with an annual urine microalbumin test. A drop in the bucket is all it takes.

Why Fistula First?

For all hemodialysis patients, a permanent vascular access is the lifeline that enables them to receive life-saving dialysis therapy every week, safely and effectively. Creating a functional vascular access is a service to patients that requires the cooperation and dedication of all care providers including nephrologists, vascular surgeons and hospitals.



1. Decrease readmissions. The most important benefit of a chronic vascular access, namely an arteriovenous (AV) fistula, is to the patient. The presence of a functional AV fistula instead of a temporary central venous catheter is known to decrease infectious complications, decrease hospitalizations, decrease re-admissions and reduce the risk of death for these complex ESRD patients. United States Renal Data System (USRDS) data show that hospitalizations for vascular access-related infections in patients with a catheter are 12 times more common than for patients with an AV fistula.

2. Reduce risk for health care-associated infections. In addition, hemodialysis patients with catheters are at increased risk for health care-associated infections, and such patients often present with multidrug-resistant infections. Hemodialysis patients with a catheter who present to the hospital with suspected bacteremia require empiric broad-spectrum antibiotic coverage and are at increased risk for serious infectious complications, including endocarditis, septic shock, MRSA infections and osteomyelitis.

3. Focus on patient safety and cost. The infectious complications of central venous catheters contribute to the high inpatient costs of care for these patients. One study found that treatment of catheter-related blood infections can result in an increase of more than \$50,000 per incident. Furthermore, ESRD patients with a catheter have a hazard ratio of death of 2.5 compared to ESRD patients with an AV fistula. Health care-associated infections are targeted by the National Quality Forum (NQF) because of their adverse impact on patient safety and cost. Currently, NQF “Safe Practice 21,” regarding infection concerns with central venous catheters, and “Safe Practice 24,” which particularly highlights concerns of multidrug-resistant organisms, address issues related to the complications of catheter use. Reducing health care-associated infections will be an ongoing part of the NQF “Safe Practices for Better Health Care” initiative and, therefore, a continued focus of The Joint Commission. Reducing hemodialysis temporary central venous catheter use in favor of a permanent vascular access such as an AV fistula is absolutely critical to reduce central venous catheter blood stream infections and drug-resistant infections in the inpatient setting.

Despite these known complications related to temporary catheter use, approximately 80 percent of kidney patients still start dialysis with a temporary catheter, and at the end of one year approximately 30 percent of these patients still have a catheter and have not converted to a permanent vascular access such as an AV fistula. GMCF feels everyone must work together to achieve a goal of having less than 50 percent of patients starting hemodialysis with a temporary catheter. In addition, processes must be implemented to reduce the ongoing temporary central venous catheter rate to 10 percent or less, or as recommended by the National Kidney Foundation’s KDOQI guidelines. These goals will require the coordinated efforts of area nephrologists, vascular access surgeons and this hospital.

It is incumbent upon all to develop processes that will reduce the high number of temporary central venous catheters currently in use. Visit [FistulaFirst](#) for more information and clinical tools. Also, you may order materials [here](#) for patients who are considering an AV fistula.