

*With your help,  
The Renal  
Network, Inc. can  
become number  
one in the nation  
for stenosis  
surveillance.*

## The Renal Network, Inc.

ESRD Networks 4, 9 & 10

### **EXCEL IN STENOSIS SURVEILLANCE**

Currently in Network 5, 66% of patients with AV grafts receive stenosis surveillance, falling short of the Network goal of 100%.

#### **How can your facility excel in stenosis surveillance?**

**K** Ensure that you are using the K-DOQI recommended surveillance methods and frequency for all AV grafts.

**K** Utilize the Fistula First Change Concept 6, listed below, to evaluate all patients with AV grafts for secondary AV fistula placement.

**K** Review the stenosis surveillance methods to guarantee the accurate reporting of your facility's practice for stenosis surveillance on the enclosed CPM questionnaire.

#### **Fistula First Change Concept 6 Secondary AVF placement in patients with AV grafts**

- Nephrologists evaluate every AV graft patient for possible secondary AV fistula, including mapping as indicated, and document plan in patient's record.
- Dialysis facility staff and/or rounding nephrologists examine outflow vein of all forearm graft patients ('sleeves up') during dialysis treatments (minimum frequency = monthly) to identify
- patients who may have suitable upper outflow vein for elective secondary AVF conversion in upper arm. Inform nephrologist and surgeon of need to evaluate identified outflow vein for AVF conversion.
- Nephrologist refers to surgeon for evaluation/placement of secondary AVF before failure of AVG.

*Addendum: Rather than electively converting well-functioning grafts, Network 5's Vascular Access Committee believes that this change concept should be considered in grafts that have a history of repeated problems.*

[See reverse for stenosis surveillance methods](#)



## **K-DOQI RECOMMENDED STENOSIS SURVEILLANCE METHODS**

### **Color-Flow Doppler**

- Recommended once every three months
- Measures the rate of flow through the AVG utilizing measurement of both velocity and vessel diameter
- Requires special equipment, training and is not often available within the dialysis facility
- Most commonly used in assessing access dysfunction rather than routine screening

### **Static Venous Pressure Method**

- Recommended every two weeks
- Static venous pressure is the natural pressure in the access
- The static venous pressure is measured after running at the prescribed Blood Flow Rate for one (1) hour.
- The bloodlines are clamped between the dialyzer and venous drip chamber. Measurement is obtained after 40 seconds
- Baseline should be obtained during the first use of the AVG
- The threshold for action is based on a ratio of intra-access pressure to mean arterial pressure or a persistent trend of increasing pressure readings

### **Dilution Technique**

- Recommended once every three months
- Dilution technique utilizing saline bolus, dyes, thermal dilution, light transmission or ultrasound
- Requires special equipment and training
- Can usually be performed at any time during the dialysis treatment
- Baseline should be obtained during the first use of the AVG
- The threshold for action with AVGS is:
  - Blood Flow < 600 ml/min or
  - Intra-access blood flow < 1000 ml/min that has decreased rapidly or
  - Intra-access blood flow < 1000 ml/min that has decreased by a lesser percentage over a longer period of time (e.g., 25% over a four month period)