



**To:** Dialysis Facility Administrators, Center Directors, Clinical Managers  
**From:** Lawrence M. Spergel, MD, FACS, FFBI Clinical Chair  
**Re:** AV Fistula Failure-to-Mature Scan  
**Priority:** High

It is widely reported in the literature that at least 30% of new AVFs fail to mature (early failures), and will require intervention to be usable. Without early recognition and intervention, these AVFs will be lost and these patients will require unsafe, prolonged use of a central venous catheter (with associated complications) for their hemodialysis--and many of these patients will then have to depend upon an A-V graft or catheter for life-long hemodialysis. Given the significant increase in AVF use in the U.S. related to the success of the AV Fistula First Breakthrough Initiative, it is critically important to identify the proportion of AVFs that fail to mature, and especially those that have not been identified and treated within the 3-month expected maximum maturation period.

This information is of critical importance, and measurement and tracking of this information should become part of every hemodialysis vascular access Quality Assurance and Performance Improvement program. The purpose of this scan is to identify the magnitude of this problem--as well as to identify the causes--so that the prevalence of usable AVFs can be maximized, thereby optimizing the care and improving the lives of those individuals receiving hemodialysis.

#### References

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## AV Fistula Failure-to-Mature Scan

Please complete and fax to \_\_\_\_\_

By \_\_\_\_\_

**Facility's Clinical Managers: Please complete this information using data from your facilities \_\_\_\_\_(date)\_\_\_\_\_vascular access trend report.**

1. Total number of AVF's that are patent (whether being used or not) \_\_\_\_
  - a. Of #1 above, number of AVF's maturing \_\_\_\_\_
  - b. Of #1 above, number of patent AVF's > 3 months old that have never been used successfully (using 2 needles) \_\_\_\_
2. Can you give some reasons for patent AVFs  $\geq$  3 months old not being used?

Check one or more that apply:

- AVF appears mature enough to be cannulated, but not being used because:
  - Patient refuses to have AVF because they prefer catheter
  - Patient refuses to have AVF cannulated for other reasons
  - Doctor/nephrologist/surgeon likes to wait longer than 3 months before cannulating an AVF
  - Doctor wants to continue to use an AVG that is still functioning
  - Doctor wants to continue to use a Catheter that is still functioning
  - Patient with new AVF not tracked to ensure timely cannulation
  - AVF too deep or poorly located to be safely cannulated
  - Lack of expertise and/or resources to evaluate AVF maturity
  - Other (please explain): \_\_\_\_\_
- AVF does not appear to be mature enough to be cannulated with 2 needles AND:
  - Instructed by doctor to wait longer and/or continue to exercise arm
  - Patient not referred by dialysis staff or physician for evaluation of AVF failing to mature
  - Patient refuses to have AVF evaluated or revised
  - AVF that was failing to mature had intervention and needs more time to heal or mature
  - AVF appeared mature but vein infiltrated on cannulation and required additional time to rest
    - AVF was cannulated but there was inadequate blood flow for dialysis. In these cases, the blood pump was usually set to approx \_\_\_\_\_ ml/min.
  - Other (please explain): \_\_\_\_\_
- AVF still not mature by 3 months – action taken/not taken

Name of person completing this scan: \_\_\_\_\_

Facility and provider number: \_\_\_\_\_

Thank you! Please return by fax to \_\_\_\_\_. If questions, please contact \_\_\_\_\_

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