


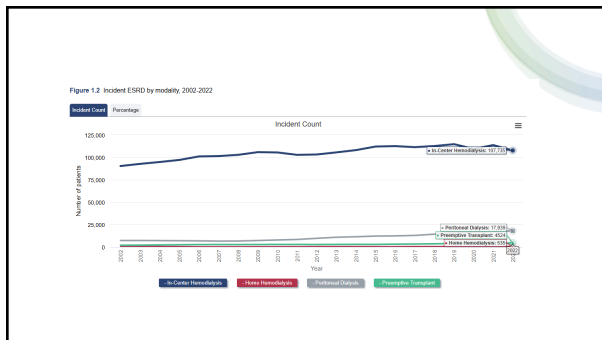
## Early Follow-up After AVF Creation Improves Access Related Outcomes

Yana Etkin, MD  
Associate Chief of Vascular Surgery  
Program Director  
Associate Professor of Surgery  
Zucker School of Medicine @Hofstra/Northwell



## Disclosures

Speakers Bureau:  
*Cook Medical*  
*Inari*



### Utilization, patency, and complications associated with vascular access for hemodialysis in the United States

Sator 3, Al-Husseini, MD, MPH<sup>1,2</sup>; Bales 1, D...; ...

**ABSTRACT**  
Background: Vascular access (VA) is a critical component of hemodialysis (HD) therapy. The choice of VA modality (in-center HD [ICHD], home HD [HHD], or peritoneal dialysis [PD]) is influenced by patient characteristics, provider preferences, and local resources. This study aims to evaluate the utilization, patency, and complications associated with VA for HD in the United States.

**RESULTS:**

- 80% start HD via TDC
- Maturation Rate after 4m: 29%– 65%
- Time to Fistula Use: 125 days
- Time to Catheter-Free Dialysis: 4.2m

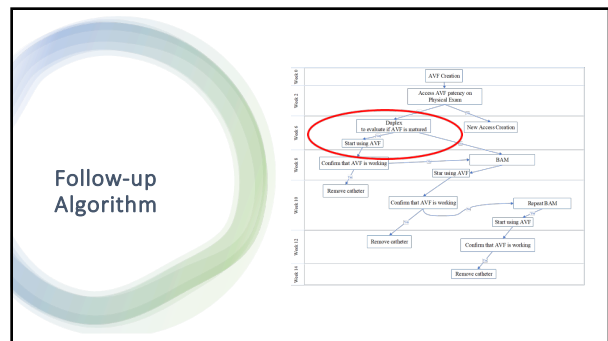
**CONCLUSIONS:** The majority of patients start HD via TDC. Maturation rates are low, and time to catheter-free dialysis is short. These findings highlight the need for improved VA management strategies.

**KEYWORDS:** Hemodialysis access, Catheter, End-stage renal disease, Chronic kidney disease, Arteriovenous fistula, Arteriovenous graft, Hemodialysis, Home hemodialysis, Dialysis, Catheter, Hemodialysis

### Statement: AV Access Early Postoperative Considerations (0-30 days)—Early AV Access Complications

10.1 KDOQI considers it reasonable for AV access (AVF and AVG) to be evaluated by a surgeon/operator for postoperative complications within 2 weeks and for an appropriate member of the vascular access team to evaluate for AVF maturation by 4-6 weeks after AV access creation and refer for further investigation if not maturing as expected. (Expert Opinion)

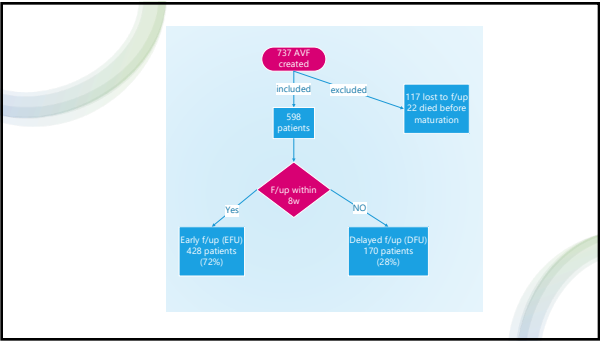
Note: Ideally, the surgeon/operator evaluating for complications would be the same individual who created the AV access.



### Objectives

Does the timing of post-op follow-up to assess AVF maturation affect access related outcomes?

- Maturation rate
- Time to BAM
- Time to first use
- Time to catheter-free dialysis

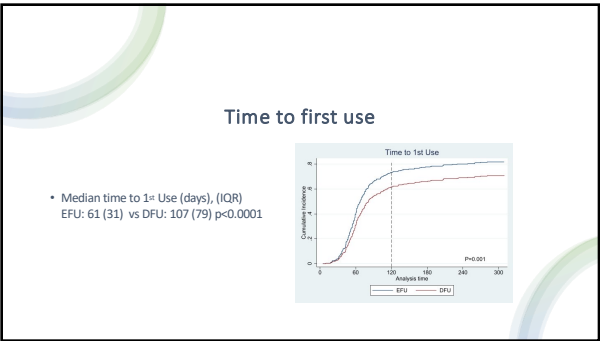
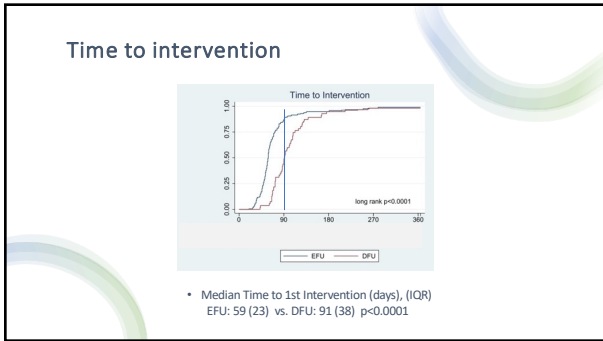


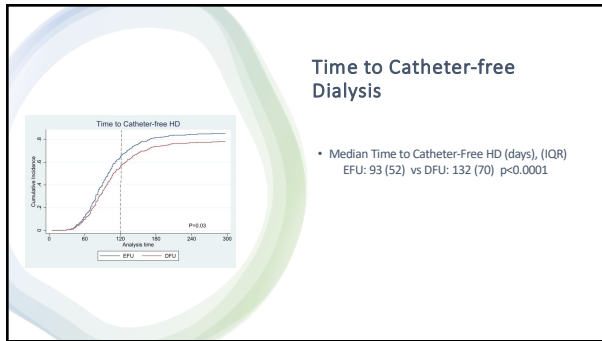
### Demographics

Demographics N (%)	EFU (n = 428)	DFU (n = 170)	P-value
Age, mean ± SD	63 ±13	61 ±14	0.45
Gender (% male)	169 (59)	73 (66)	0.18
Race			
Asian	106 (37)	37 (33)	0.72
Black	110 (38)	40 (36)	
White	60 (21)	27 (24)	
Unknown/Other	13 (5)	7 (6)	
Ethnicity (%Hispanic)	26 (9)	13 (12)	0.41

### Maturation Outcomes

Outcomes	EFU (n = 428)	DFU (n = 170)	P-value
Median time to f/up (days), (IQR)	39 (27)	78 (45)	< 0.0001
Maturation rate, n(%)	347 (81%)	148 (87%)	0.11
Primary maturation, n (%)	146 (34%)	73 (43%)	0.07





- ### Risk Factors
- Outpatient AVF creation was associated with 3 times higher odds of f/up (OR= 3.06 95% CI 1.97-4.74, p=0.001)
  - SNF disposition was associated with 71% reduced odds of f/up (OR= 0.29 95% CI 0.14-0.58, p=0.01)
  - Living closer to surgeon's office (<7mi) increased the likelihood of f/up (OR 0.69 95% CI 0.47-0.99, p=0.04)
  - History of failed AV access was associated with 3 times higher odds of f/up (OR= 3.16 95% CI 1.34-7.44, p= 0.01)

- ### Limitations
- Retrospective analysis
  - Single healthcare system
  - Single surgeon

- ### Conclusions
- Delayed follow-up is associated with worse access-related outcomes, including extended time to interventions, 1<sup>st</sup> use, and to catheter-free HD
  - Creation of AVF at an inpatient setting, disposition of patients to a SNF, and distance of patient's primary residence to surgeon's office were found to be associated with delayed follow up.
  - Standardized follow-up protocol could be useful in improving HD outcomes

