WELCOME *To the*

2026 SYMPOSIUM

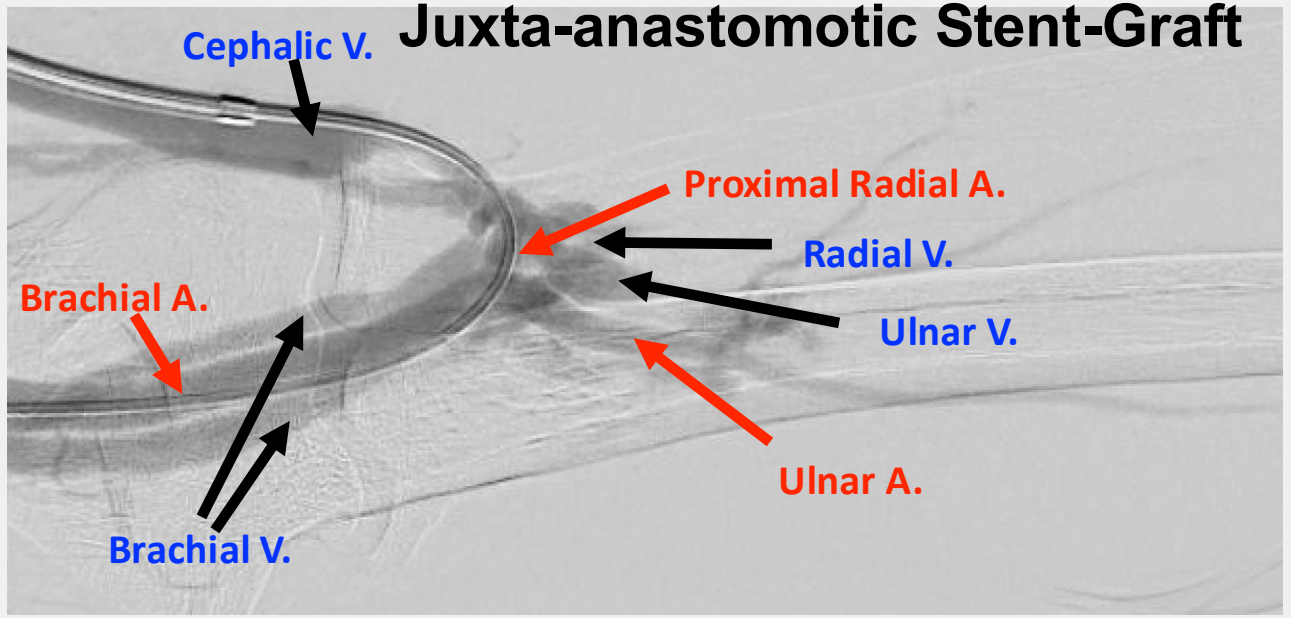
EndoAVF is Done vs Surgical Access Desserts

Ahmed Abdel Aal, Dirk M Hentschel, Mohamad Hussain,
Robert Shahverdyan, Suren Shenoy, Monnie Wasse

Case 1 Endo-AVF

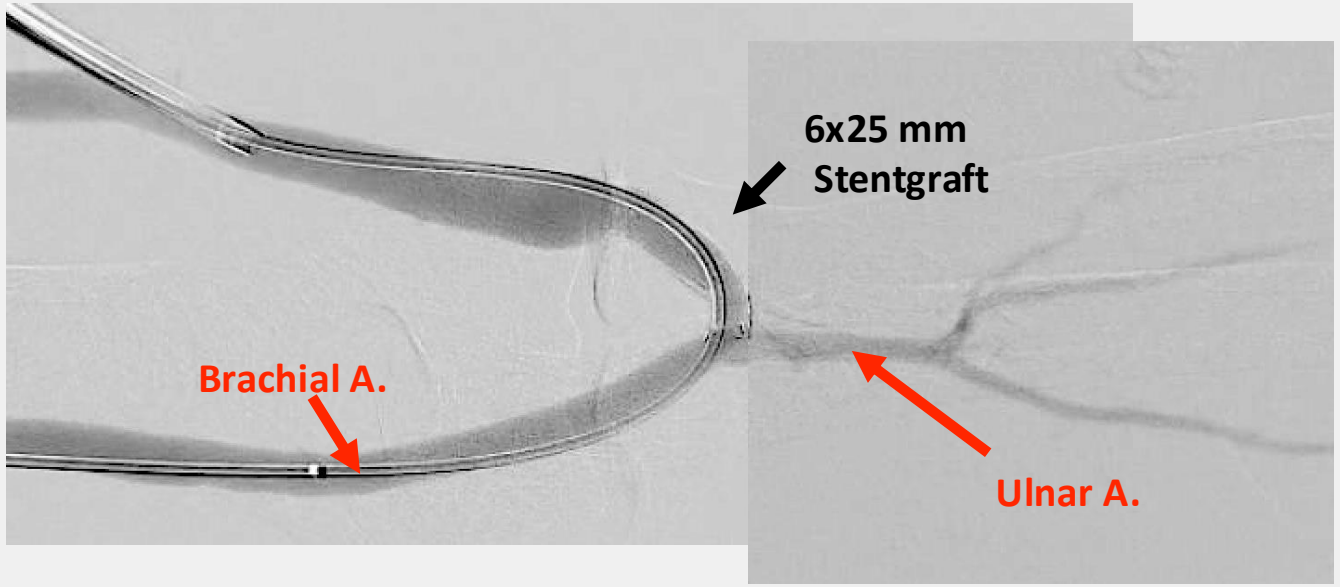
92-year-old African-American ESRD patient undergoes endo-AVF creation on 3-18-2021.

Fistulogram on 4-20-2021 with multiple brachial outflow veins, limited cephalic vein augmentation.



Arterial anastomotic stent graft (6x25 Viabahn) placed on 6-1-2021 (flow 1210 ml/min).

Continued use without any intervention until death on 3-14-2025.



Case 2 Endo-AVF

78-year-old African-American ESRD patient undergoes endo-AVF creation in 2022 with brachial vein coil embolization.

Juxta-anastomotic angioplasty on 1-20-2023.

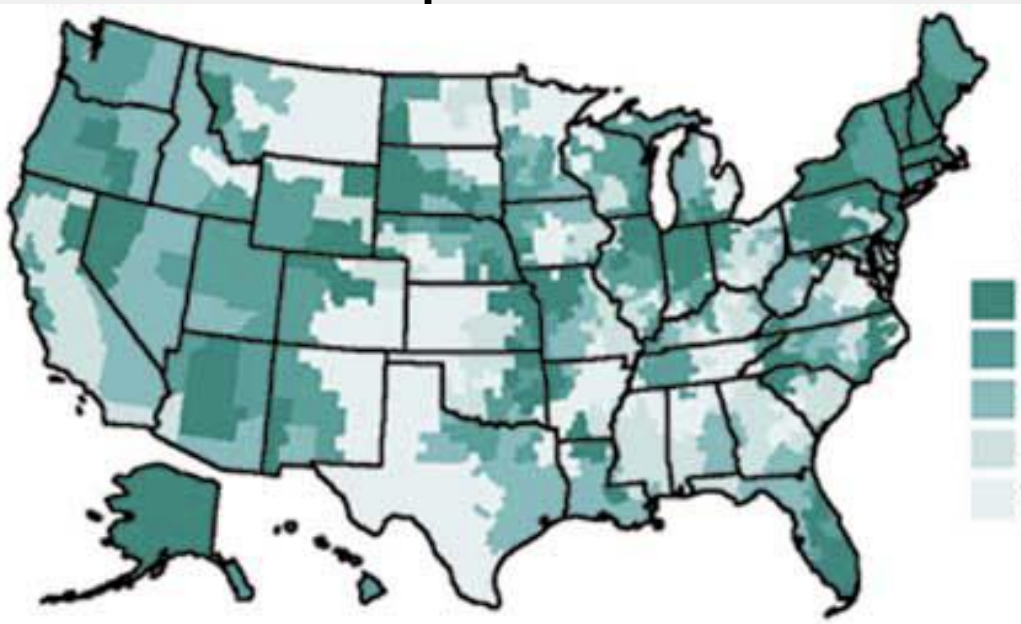
Flow volume ~ 1800 ml/min with arm edema, fistulograms on 9-16-2024 and 1-15-2025 without central stenosis.

Access use until death 1-24-2026

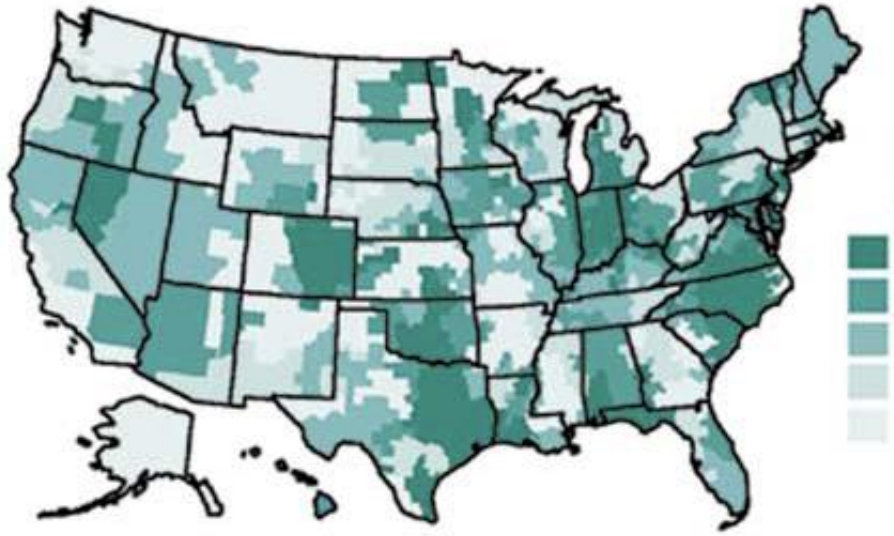




AVF prevalence varies (widely) across the US



Fistula rate/1000 pt. yrs.,
Overall rate=71
83+ (101)
70 to < 83
59 to < 70
47 to < 59
below 47 (30)



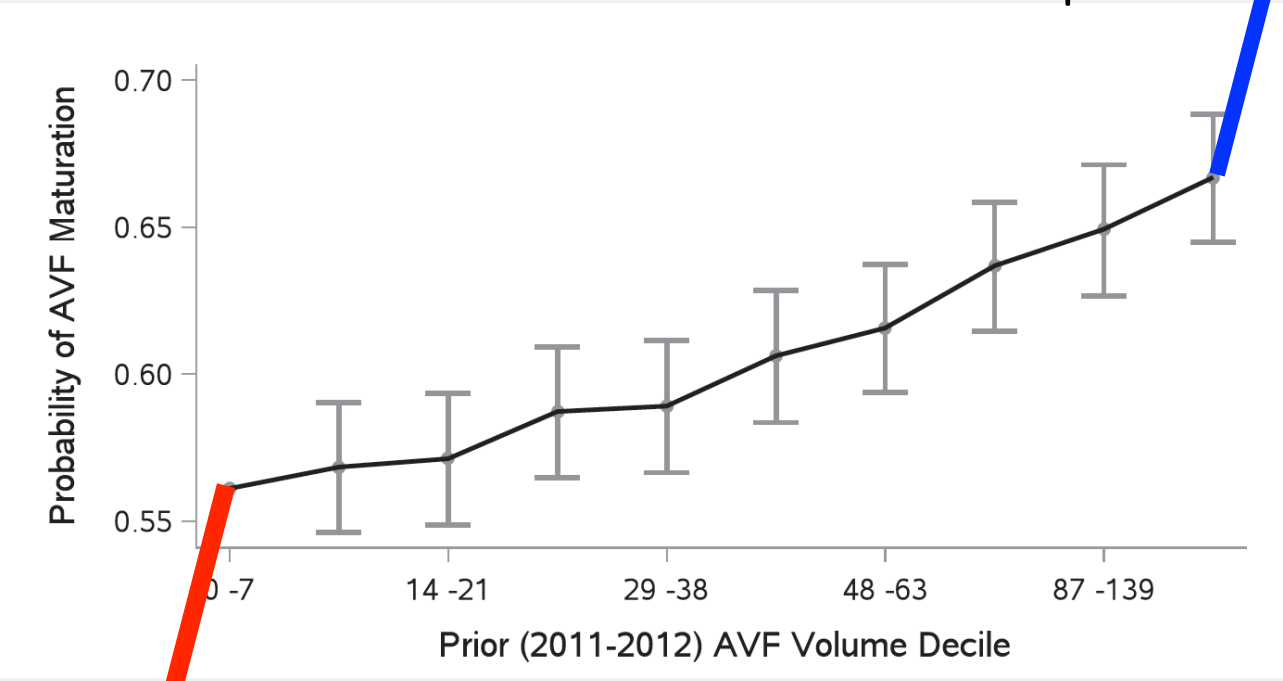
Permanent rate/1000 pt. yrs.,
Overall rate=207
229+ (296)
192 to < 229
166 to < 192
132 to < 166
below 132 (97)

Surgical Outcomes and AVF volumes vary widely

Case Volume correlates with Successful Maturation (Shahinian AJKD 2020)

85 %

top 9.7 %



bottom 6.9 %

23%

Access Surgeons differ

- Training
- National or Regional Centers
- Volume

- 2,770 surgeons who placed > 5 AVFs in 2013 and 2014, total 49,826 AVFs in CMS patients
- Maturation Success does not plateau
- Extremes: top 243 (9.7%) surgeons 85%, bottom 174 (6.9 %) 23 % success rate, ~ 1,500 surgeons < 5 AVF/y
- Important to know:
  - →2016 - 1,251 surgeons placed more than 10 access (AVG or AVF), total 32,767 accesses
  - →2016 - 3,071 surgeons placed an additional 27,035 accesses