



# Quality Improvement: Fistula Rates

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# Goal

- The goal of Madisonville Davita #1961 is to provide safe, quality care, with a direct focus on optimal dialysis treatment through promotion of Arterio-venous fistula and vascular access management while maintaining and/or exceeding a prevalent AVF rate greater than or equal to 80% and a catheter rate less than or equal to 5%
- December 2009:
- AVF rate 76%
- AVG rate 12%
- Catheter rate 12%



# Four Factors Contributing to A Successful Vascular Access Program

1. Develop a working relationship with surgeons and surgical staff
2. Early nephrology consult
3. Early access placement by surgeons
4. Education



## Develop a Working Relationship with Surgical Staff

- In 2006, we developed a vascular access program.
- Appointed vascular access coordinator
- The vascular access coordinator was responsible for coordinating all vascular access procedures such as fistulograms and catheter removal between the surgeons and dialysis facilities in this area.
- Once a month, we held a meeting with the surgeons, surgeon's staff, nephrologists, and nurses. In this lunch meeting, we discussed any problems we saw with the flow of the process and developed a working relationship with the surgical staff.



# Early Referral

- Our Nephrologist has held many teaching sessions with family physicians.
- When a patient is seen by a family physician has a GFR  $< 50$  or creatine  $>1$ , they are to be referred to a Nephrologist for consultation.
- The Nephrologist either monitors the patient closely or initiates dialysis immediately if needed.



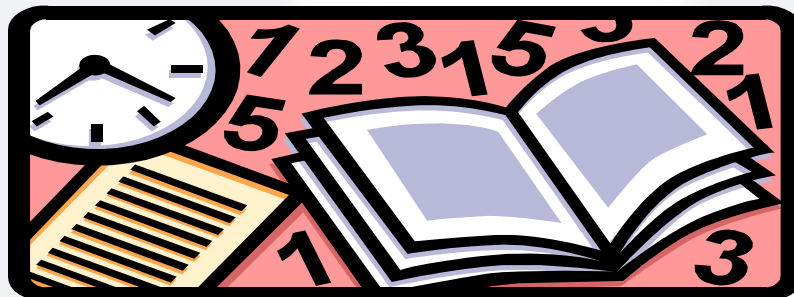
# Early Access Placement

- The Nephrologist typically refers a patient for access placement when the patient reaches stage IV kidney disease.
- If the patient is progressing through the stages rapidly, he refers earlier.
- Close to 90% of our admissions have a mature access when they are initiated.
- All patients referred for an AVF have a vein mapping prior to the initial meeting with the vascular surgeon.



# Education

- Education begins when patients see the Nephrologist for the first time.
- When it gets closer to time for dialysis to be initiated, a time is scheduled for the patient to come to the outpatient center and be educated by the nurse, dietician, and social worker.
- If a catheter is placed, the surgical staff immediately starts educating the patients and explains the catheter is not permanent and our goal is to get it out as soon as possible.
- The dialysis staff educates patients on the risks of catheters and encourages early catheter removal.



# Obstacles

- Noncompliance is our largest obstacle.
- Admitted 3 patients in the last month that went 8 months –1 year without a follow up with the Nephrologist.
- Appointments being missed/rescheduled for access placement.
- End of life issues: at what point do you stop placing permanent accesses? Family's decision.

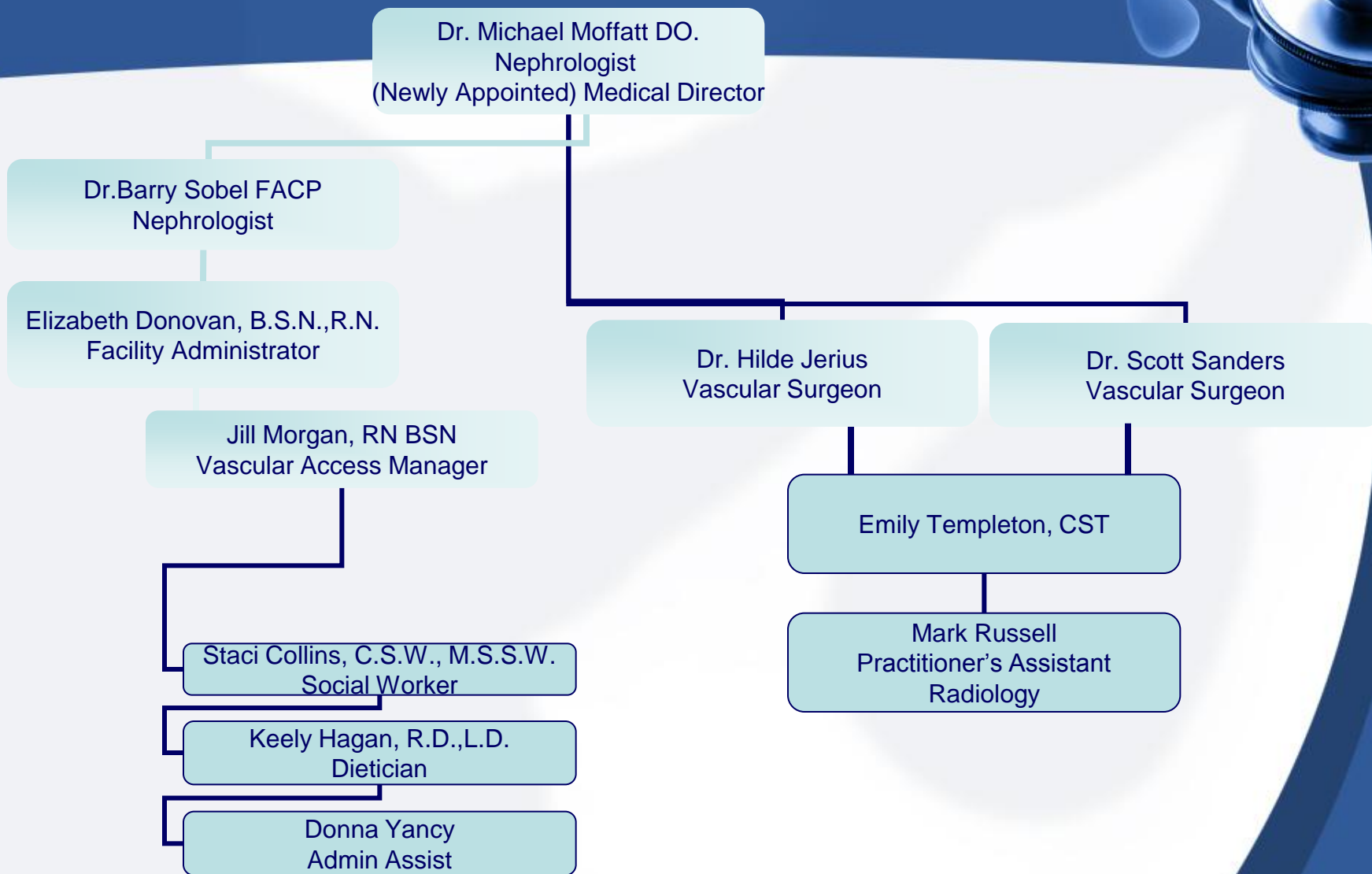


# CQI Meetings

- CQI Meetings held monthly, which is a CMS requirement.
- Discuss our monthly outcomes compared to the month before.
- Identify factors that caused our outcomes to not meet expectations.
- Constantly looking for ways to improve our outcomes.



# CQI Team Organizational Chart



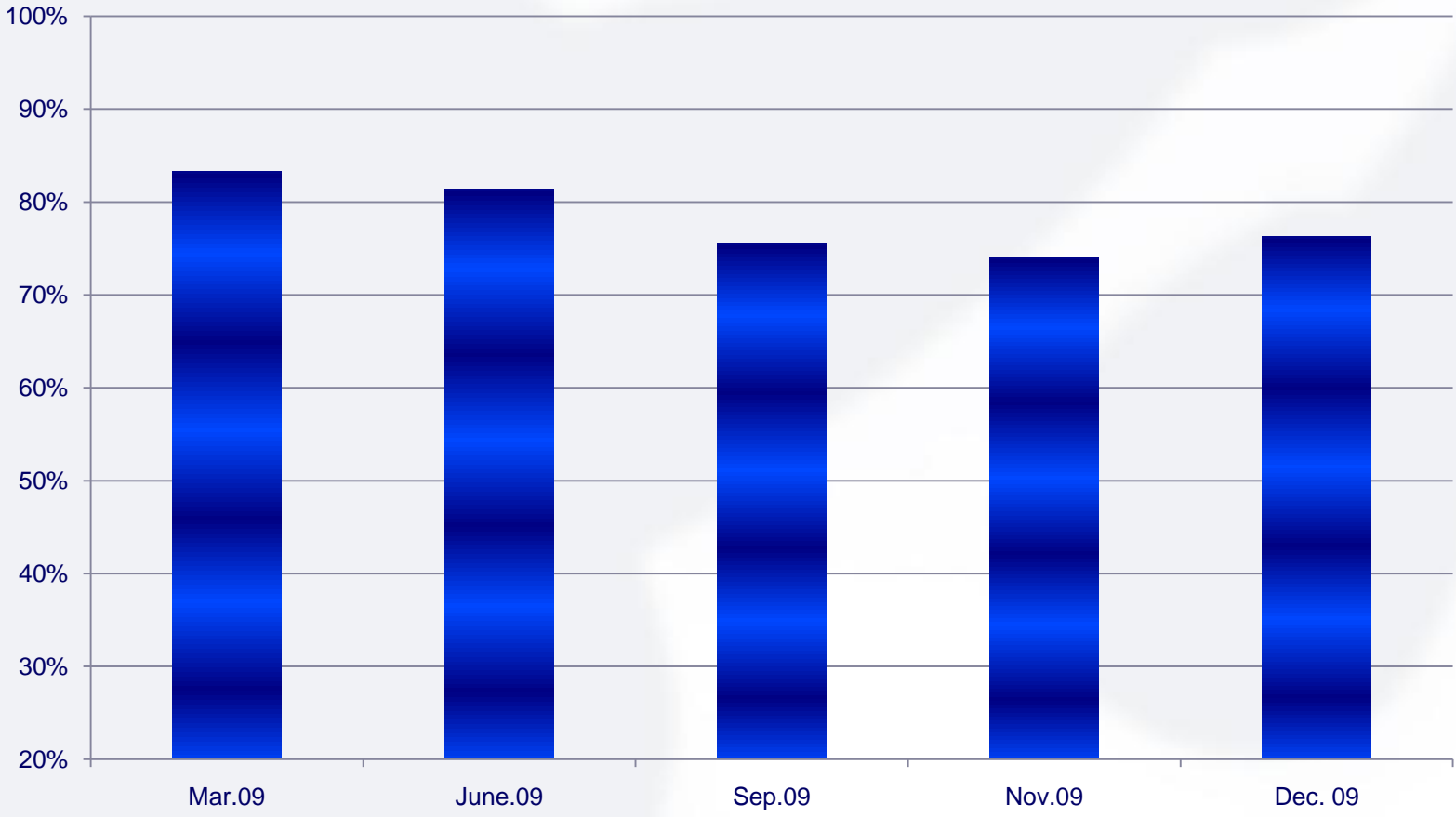
# Quality Improvement Summary



- Nephrologist recommends and documents an AVF plan for all patients pending dialysis, regardless of their modality.
- Every patient referred for an AVF only creation undergoes a vein mapping prior to their initial meeting with the vascular surgeon.
- Nephrologist refers patients for AVF no later than stage IV kidney disease.
- The clinical coordinator collaborates with the vascular surgeon's assistant for prompt intervention when there is a problem with the access. Common problems include:
  - Prolonged bleeding
  - High venous pressures
  - Difficulty cannulating



## AVF Rates





**QUESTIONS????**