

# *Hemodialysis Catheter Reduction*

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# Catheter patients initiating HD

- **65.3% in 1995**
- **82% in 2006**

# Mortality Risk for Catheter patients

- **39% risk in non-diabetic patient**
- **72% risk in diabetic patient**

# Reducing Dialysis Catheters

- **Dedicated, persistent team**
- **Vascular Access Manager**
- **Communication**
- **Education**
  - All Staff
  - Patients
- **Patience, patience, patience**

# The Hemodialysis Catheter Reduction Collaborative

- **Pilot Program started in March 2009**
- **Suggested Strategies to Improve Success with Reducing Catheters**
- **Facilities from different regions with continued high catheter rates chosen for the program**
- **Goal was 3% increase in patients without catheters**

# The Hemodialysis Catheter Reduction Collaborative

- **Medical Director and Clinical Manager conduct mandatory staff meeting with all facility staff on the importance of reducing catheters.**
  - **Positive outcomes when catheter not used**
  - **Facility catheter rate**
  - **Opportunities to decrease catheter usage**
  - **Identify each staff members role**
  - **Vascular Access Team (VAT)**

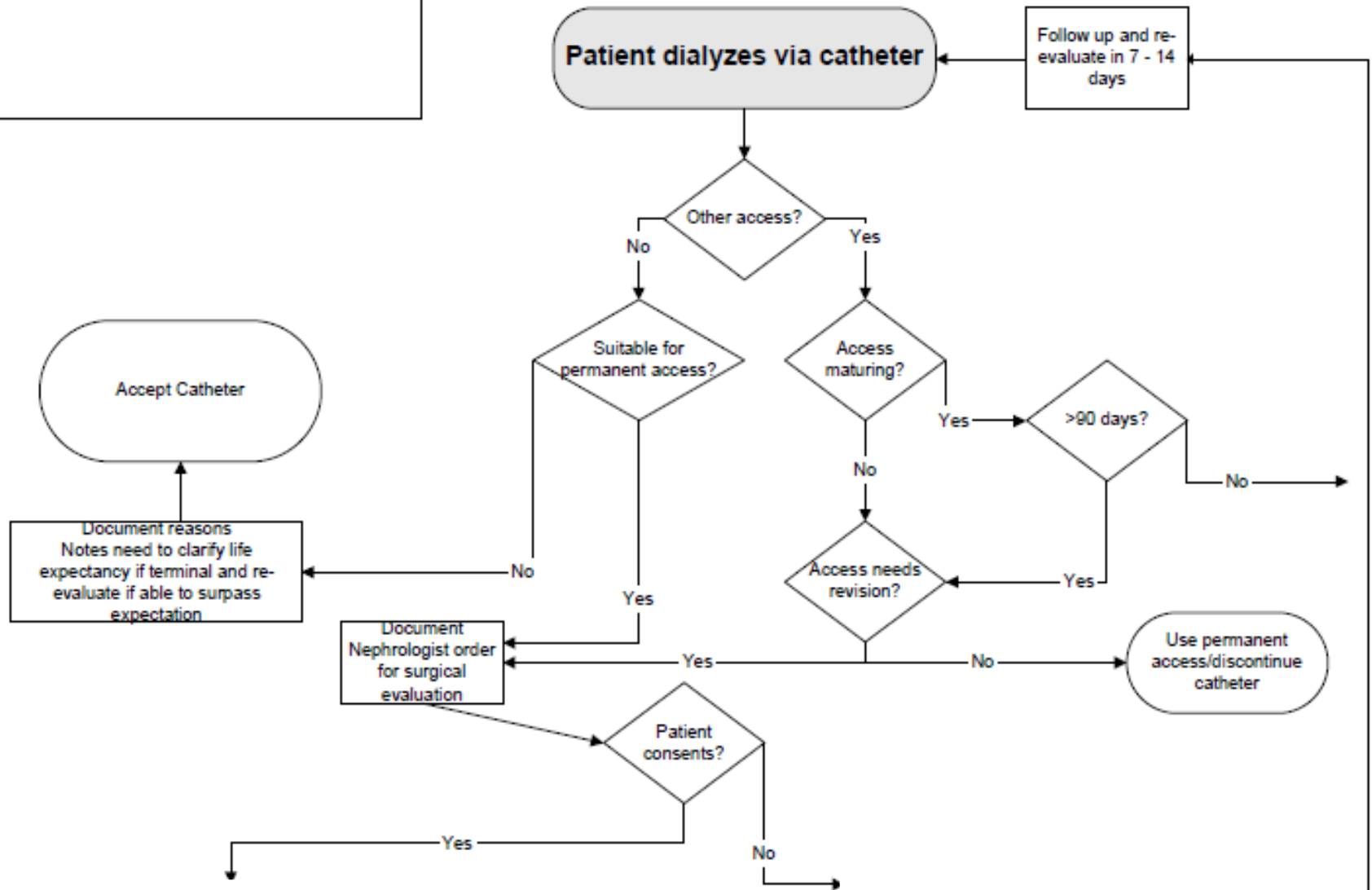
# The Hemodialysis Catheter Reduction Collaborative

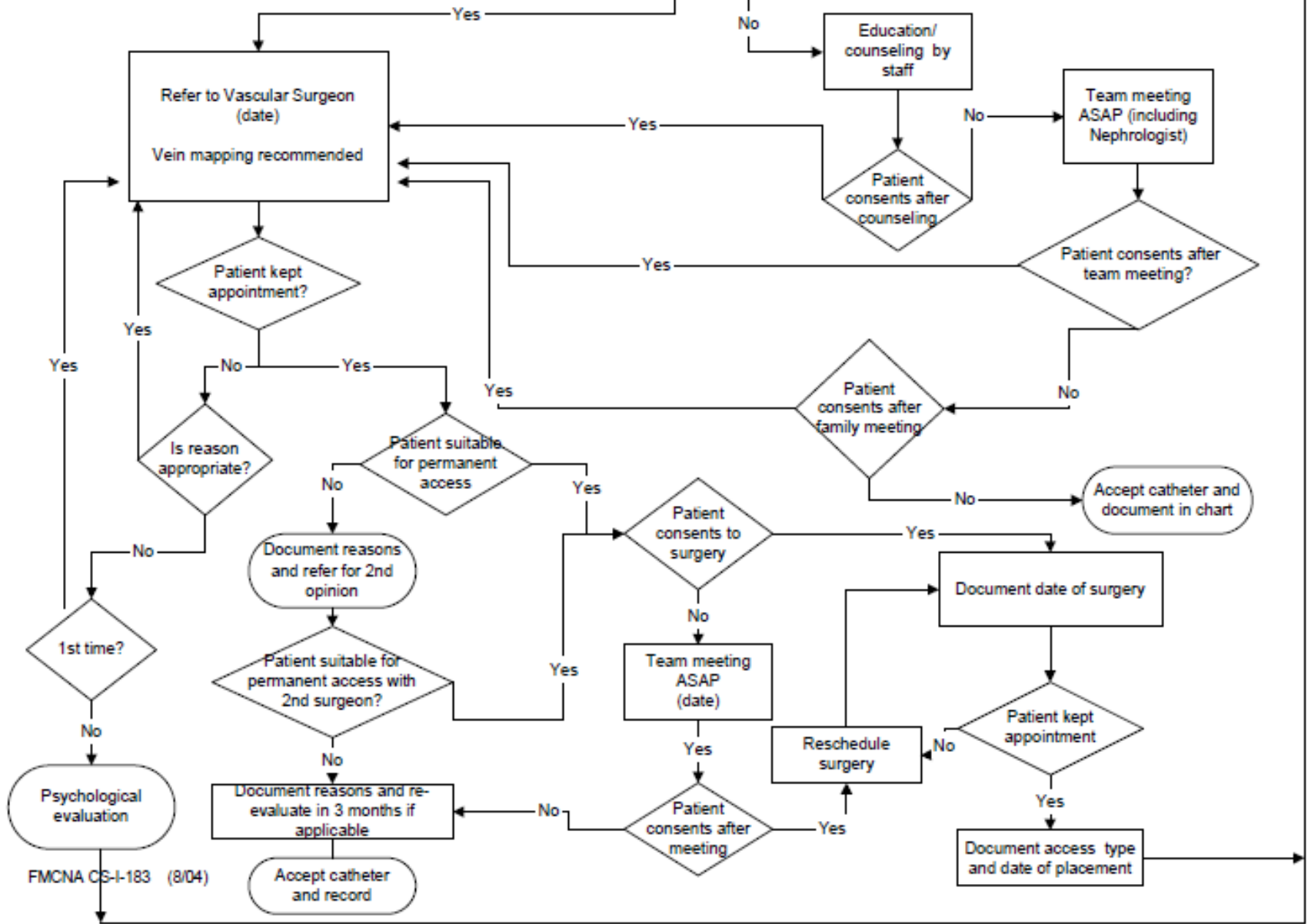
- **Vascular Access Manager designated**
- **Surgeon, Interventional Nephrologist/Radiologist with best outcomes identified**
- **Timely referral of all new catheter patients to surgeon**
- **New Access Cannulation protocol**

# The Hemodialysis Catheter Reduction Collaborative Vascular Access Manager Role

- Provides staff/patient education
- Timely referrals
- Assess access maturation status
- Implement AVF cannulation protocol
- Timely catheter removal
- Identify secondary AVF access opportunities

# Permanent Vascular Access Placement Care Map





# The Hemodialysis Catheter Reduction Collaborative

- **Vascular Access Tracking Tool**
  - Maintain on all catheter patients
  - Current information
  - Referrals
  - Precedes to Catheter Removal

# The Hemodialysis Catheter Reduction Collaborative

- **Medical Director and Clinical Manager meet with preferred Surgeon(s)/ Interventional Nephrologist(s)/ Radiologist(s)**
  - **Share goals**
  - **Facility's catheter rates**
  - **Review risks and hazards of catheters**
  - **Strategies to increase AVF**
  - **Maintain communication**

# The Hemodialysis Catheter Reduction Collaborative

- **Identify patients who are resistant to permanent access placement**
- **Schedule Plan of Care Conference**
  - **Patient (try to include family members)**
  - **Nephrologist**
  - **VAT**
  - **Discuss the importance of getting assessed for placement of an AVF/G**

# The Hemodialysis Catheter Reduction Collaborative

- **Focus on minimizing long term use of catheters when permanent access is an option**
  - **Continue talking to patient regarding risks of catheter**
  - **Utilize an “Informed Refusal Form” that includes risks and physician recommendations.**

# Informed Refusal Form

- **Educational tool for physician**
- **Information regarding the risks of CVC**
- **Must be in language that is easily understood by patients and family**
- **3 documented discussions within a six month period**

# Informed Refusal Form

- **2 – 3 times increased risk of death**
- **5 – 10 times increased risk of serious infection**
- **Increased risk of pain and debilitating complications from infection**
- **Increased risk of being sicker because of inadequate BFR**
- **Increased risk of frequent hospitalizations**

# Supplemental Catheter Reduction Strategies

- **Access Blood Flow measurements**
- **BFR and/or adequacy not achieved**
- **Evaluate failing AVG for possible secondary upper arm AVF**
- **Button Hole Cannulation technique**

# The Hemodialysis Catheter Reduction Collaborative

- **During the Pilot Program, routine conference calls are conducted with various members of the VAT.**
- **Identify specific facility needs**
- **Share experiences with a focus on overcoming barriers, staff efforts and surgeon collaboration successes.**
- **Monthly Progress Reports**

# CRC FINDINGS

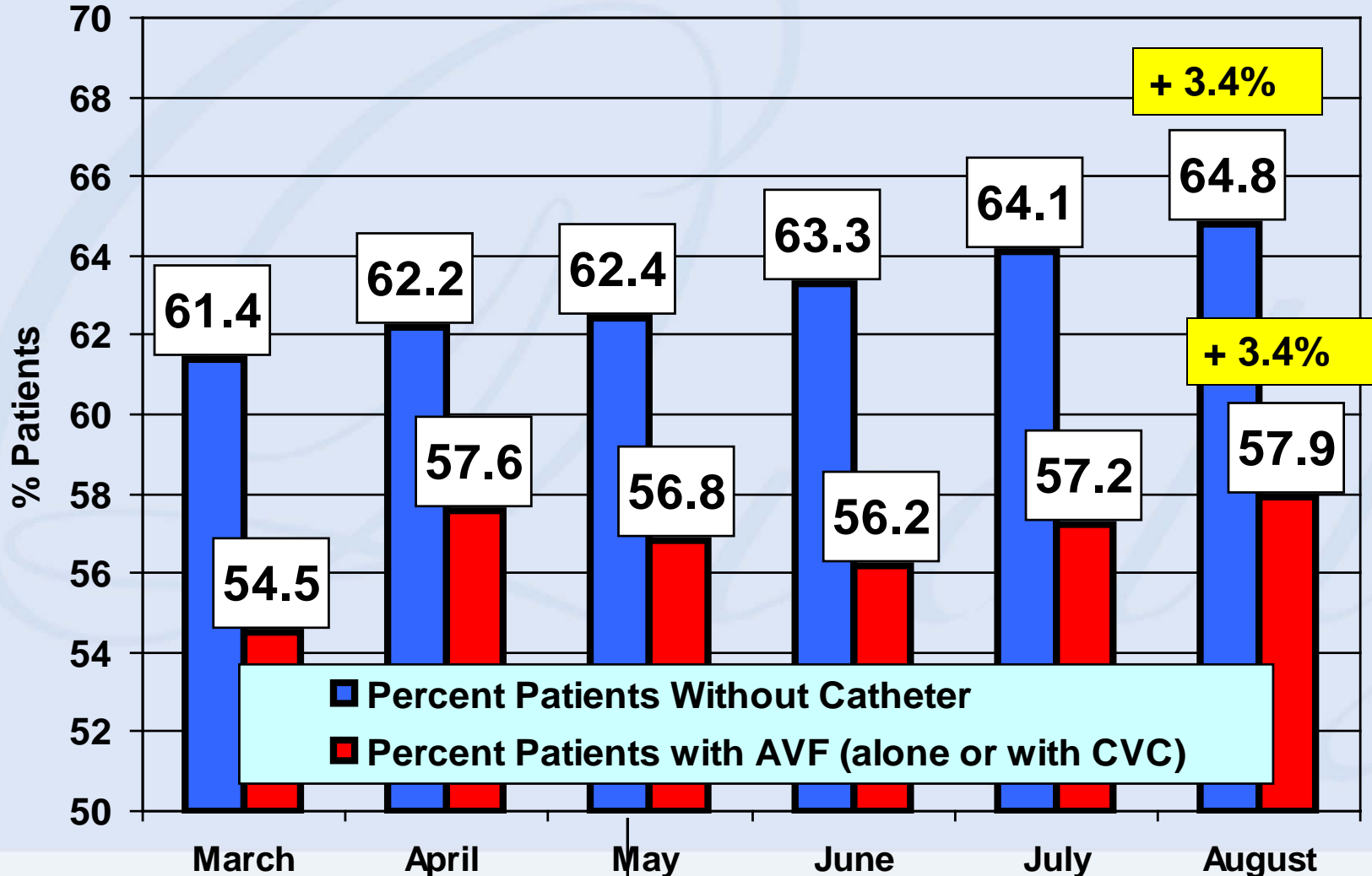
## Catheter Reduction:

- **3.4%** average improvement in the number of patients without catheters (facility range -4% to + 14%)
  - (Note: Monthly facility specific CRC rates are variable due to new admits with CRC, census/modality changes and ongoing team efforts to decrease CVCs and increase AVFs.
- **70%** (54/38) facilities with at least 1% improvement in percent of patients without catheter
- **127** additional patients without catheters

# Catheter Reduction Collaborative Pilot

Aggregate Trends for 54 Facilities: **March to August 2009**

Goal = 3% Increase in Patients without Catheters



■ Percent Patients Without Catheter

■ Percent Patients with AVF (alone or with CVC)

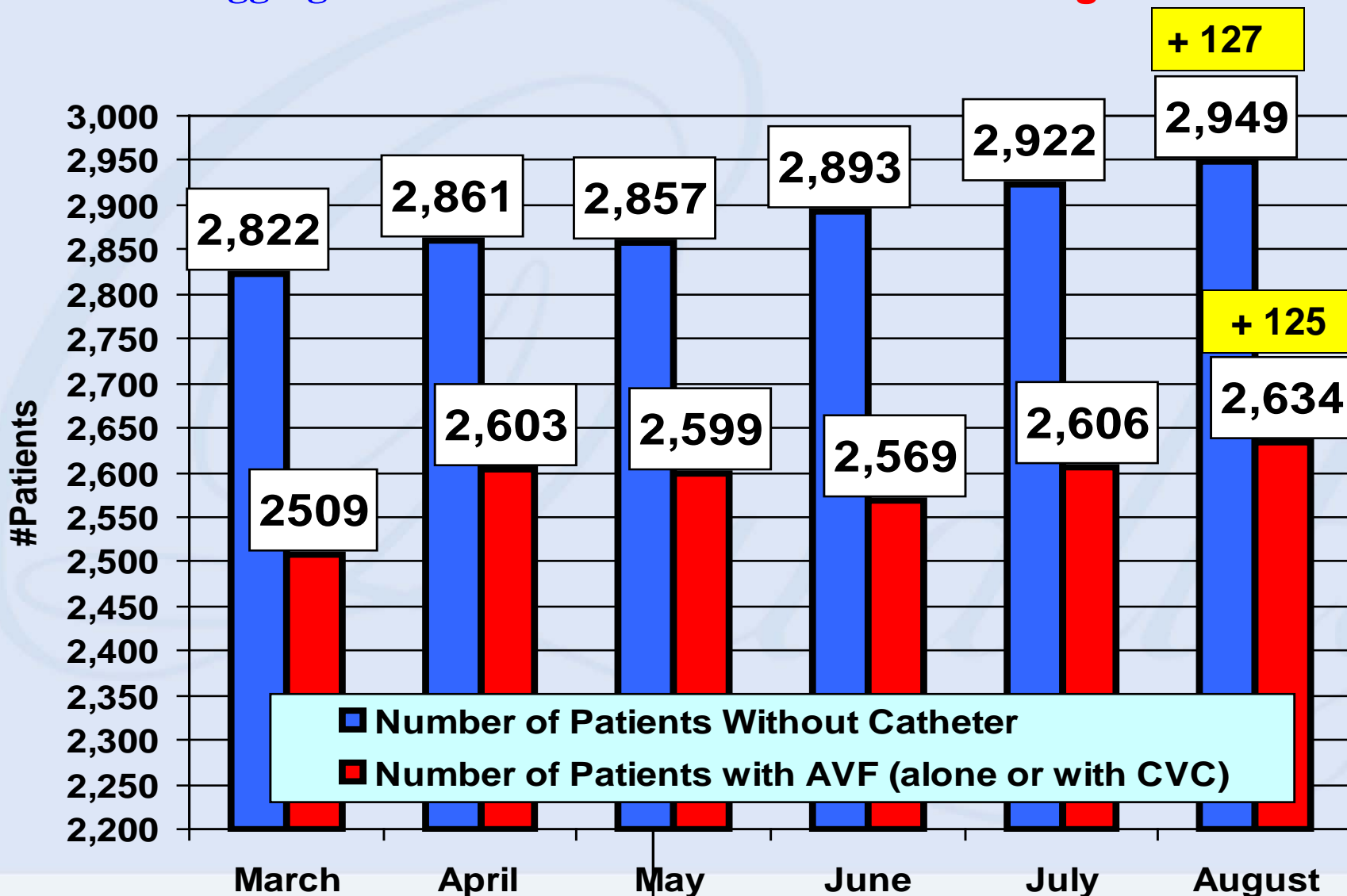
# CRC FINDINGS

In **AV- Fistula Increase ( AVF only or AVF with CRC)**:

- **3.4%** average improvement number of patients with AVF placed  
(facility range -9% to + 15%)
- **64.8%** (54/35) facilities with at least 1% improvement in percent of patients with AVF placed
- **125** additional patients with AVF

# Catheter Reduction Collaborative Pilot

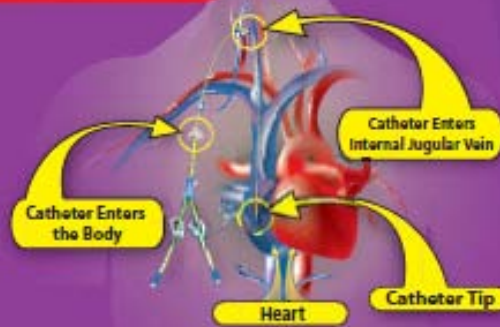
Aggregate Trends for 54 Facilities: **March to August 2009**



■ Number of Patients Without Catheter

■ Number of Patients with AVF (alone or with CVC)

# Do you really want this tube (catheter) in your heart?



See your nephrologist or surgeon to determine if you can get an AV fistula or AV graft.  
Your patient care staff will be happy to assist you today!

## **Your Access...Your Life**

**Additional information is available.**

**Please ask your patient care staff.**

### **Risks of Catheter:**

- **Higher death rate**
- **Higher infection rate**
- **Higher clotting rate**
- **Increased hospital visits**
- **Difficult to obtain adequate blood flow**
- **Least preferred hemodialysis access**

### **Get Started Towards an AV Fistula Today**

- **Less chance of infection**
- **Lowest clotting rate of any access**
- **Considered the best vascular access method**

# **In every patient with a Catheter, ask these questions:**

- **Can this patient have a fistula or graft?**
- **Why not?**
- **Who says so?**
- **Are they sure?**
- **Has it been confirmed?**
- **What can I do to overcome barriers?**

# Reducing Hemodialysis Catheters

**When performed collectively and reliably, these practices can reduce the reliance on catheters in the dialysis facility as well as their associated severe health risks.**