

## D. Fistula First (FF) Initiative.

The development of Quality Improvement Projects (QIP) is mandated in the ESRD Network contracts with CMS. The QIPs are developed and directed by the MRB, then reviewed, approved and monitored by the BOT. In 2009, the majority of quality improvement efforts were focused on continuing and improving AV fistula rates through the Fistula First Initiative.

**Background:** In 2003, all 18 of the ESRD Networks and CMS, along with clinicians, dialysis providers, and patients, developed a three-year plan called the National Vascular Access Improvement Initiative (renamed Fistula First in 2004). This plan implements strategies for the improvement of patient vascular access outcomes to reach the CMS goal and K/DOQI guidelines for AV fistula use of >65% prevalence.

Fistula First aims to build on established methods to increase fistula use, and to take advantage of system-level diagnosis and strategies for improvement. Collaboration between ESRD Networks, providers, physicians, vascular surgeons, and health professionals is key to spreading the change ideas for improving AV fistulas.

### **Primary objectives:**

- To increase the prevalence rate of AV fistula in Network 9

from 47.8 percent in March 2009 to 51.5 percent in March 2010 (an increase of 3.7 percentage points) and increase Network 10 from 49.4 percent in March 2009 to 53.0 percent in March 2010 (an increase of 3.7 percentage points).

- To increase the awareness of early referral for vascular access in the incident CKD patient.
- To educate providers, physicians, and vascular access surgeons on documentation of AV fistula assessment pre-hemodialysis access placement.
- To educate providers, physicians, and vascular access surgeons on the AV fistula improvement strategy.
- To provide resources and tools to providers to assist with developing initiatives for community partnering, changing

patient culture, and catheter reduction.

- To educate medical directors, providers, and the facility interdisciplinary team on the best practices of a Quality Assessment and Performance Improvement

(QAPI) program for vascular access management.

Progress toward these goals by December 2009 is detailed in Figure 44:

<b>Figure 44. Network 9/10 Fistula First Percentages Fistula Prevalence as of December 2009</b>						
	Network 9		Network 10 Achieved Goal		K/DOQI Guidelines	CMS 'Stretch' Goal
	Mar'09	Dec'09	Mar'09	Dec'09		
<b>Fistula Prevalence</b>	47.8%	49.9%	49.3%	53.3%	>65%	66%

**Actions.** The national Fistula First Breakthrough Initiative (FFBI) coalition conducted an extensive root cause analysis in 2009. This root cause analysis was used to develop a strategic plan that identified priority areas to be addressed.

The following seven strategies were developed into an operational plan to increase the AV fistula utilization rate to 66% in prevalent hemodialysis patients for ESRD Networks and to assist Quality Improvement Organizations (QIOs) in reducing the gap between the statewide baseline

AV fistula rate and 66% for incident hemodialysis patients:

- Strategy 1: Nephrologist as Leader - Encourage and support nephrologists to take a leadership role and be accountable for vascular access management in all hemodialysis patients.
- Strategy 2: Leveraging Partnerships - Partner to improve AV fistula placement and utilization rates.

- Strategy 3: Hospital Systems - Modify hospital systems to promote AV fistula placement.
- Strategy 4: Patient Self-Management - Promote patient self-management throughout the stages of chronic kidney disease.
- Strategy 5: Addressing Access Problems - Promote fast-track protocols for rapid identification and referral of vascular access problems which include failure to mature, revision of the failing AV fistula, and placement of an AV fistula.
- Strategy 6: Practitioner Training and Credentialing - Promoting training, experience, and credentialing of healthcare professionals in the area of hemodialysis vascular access management.
- Strategy 7: FFBI Change Concepts - Expand and endorse the current Change Concepts for education and promotion throughout the renal, surgical, and interventional communities.

The staff of Network 9/10 utilized tools and resources from [www.fistulafirst.org](http://www.fistulafirst.org) for education and technical support and marketed new tools that were developed through FFBI to providers and professionals

The staff of Network 9/10 participated on FFBI activities at the national, regional and local level.

The Quality Improvement Director participated on the Hospital Systems Change Concept Workgroup. This workgroup of the Fistula First Breakthrough Initiative met by conference call on October 28th and November 9th during 2009 and developed a care plan, resources, and tools to be utilized by various identified hospital personnel to improve placement of fistula within the hospital both at CKD Stage 4 and upon emergent care for ESRD.

The Patient Services Director and the Communications Director participated on the Patient Self-Management Change Concept Workgroup. This workgroup met by conference call on October 22nd and November 3rd during 2009 and developed the concepts, principles, guidelines, and protocols for providers to use to promote patient self-management.

Nationally, Network 9/10 participated on the FFBI conference calls for Quality Improvement Directors (QID) of all Networks on May 13, June 10, July 22, September 9, October 14, November 11, and December 9, 2009. FFBI Coalition meetings were attended on April 7, August 26, and December 2, 2009.

Although at year-end the CMS contract goal in Network 9 had not been met, the staff of Network 9/10 worked with facility staff members

**Vascular Access Advisory Panel.**

A panel of experts oversees the Fistula First Initiatives, under the direction of the MRB. This Vascular Access Advisory Panel (VAAP) was

toward improving the AV fistula rates for the regional population of Illinois, Indiana, Kentucky and Ohio, through the following activities:

organized at the beginning of the Fistula First Initiative in 2004. The VAAP continued its activities during 2009. Members of the panel include:

Tim Pflederer, M.D., Chair	Renal Care Associates	Peoria	Illinois
Anil Agarwal, M.D.	Ohio State University	Columbus	Ohio
George Aronoff, M.D.	University of Louisville	Louisville	Kentucky
Michael Brier, Ph.D.	University of Louisville	Louisville	Kentucky
Luis Cespedes, M.D.	RCG-Villa Park	Elmhurst	Illinois
Deepa Chand, M.D.	Akron Children's Medical Center	Akron	Ohio
Peter DeOreo, M.D.	Centers for Dialysis Care	Cleveland	Ohio
Wendy Jagusch, R.N.	Centers for Dialysis Care	Cleveland	Ohio
Richard Keen, M.D.	John H. Stroger Hospital of Cook County	Chicago	Illinois
Gordon McLennan, M.D.	Cleveland Clinic	Cleveland	Ohio
Prabir Roy-Chaudhury, M.D.	University of Cincinnati	Cincinnati	Ohio
Mary Showers, R.N.	DaVita	Elyria	Ohio
Marcia Silver, M.D.	Metro Health Medical Center	Cleveland	Ohio
Louis Thibodeaux, M.D.	General & Vascular Surgical Specialists	Cincinnati	Ohio
Jay B. Wish, M.D.	University Hospitals of Cleveland	Cleveland	Ohio

The VAAP is charged with developing and implementing strategies to achieve Fistula First goals, under the direction of the MRB. The VAAP met twice during

2009, once in May and once in October. Conference calls were scheduled during interim times to continue the work of this advisory body. Reports of VAAP activities

were made continuously to the MRB. Network staff participates on the national FFBI coalition, so ideas

**Data Distribution.** Fistula First Facility Specific Reports were sent to all hemodialysis programs in January 2009 to show third and fourth quarter 2008 data, June 2009 to show first quarter 2009 data, December 2009 to show second and third quarter 2009 data, and February 2010 to show fourth quarter 2009 data.

This quarterly FF data report gives facilities the number of prevalent fistula needed to meet fistula percentage goals based on the total number of patients and the number of patients with a fistula in their facility. It displays graphs illustrating quarterly results, as well as progress over time compared to the state, Network and United States where applicable. It also graphs same population size facilities to each other in their Health Service Area (HSA) so that facilities can use this report to compare themselves to other facilities of like size regarding AV fistula rates in their area.

This report provides the dialysis facilities with a tool which can be used in conjunction with other facility methods of continuous quality improvement (CQI) to identify patients suitable for conversion to a fistula. The FF data report is sent to

between these two groups are shared routinely.

facility medical directors, administrators, and nurse managers quarterly.

These data also enable the Network to target facilities with poor outcomes for intervention. Facilities with good outcomes are utilized for positive intervention and mentoring.

**Communications.** Stakeholders were identified as the facility medical director, administrator, nurse manager, vascular access coordinators, nephrologists, patients, vascular access surgeons, and interventional radiologists. Individual databases are continually updated and maintained to enable ongoing communications with these audiences. Information and educational materials regarding the Fistula First Initiative were sent to the various stakeholders by mail and email as appropriate and necessary.

- January 15 & 21, 2009 - Buttonhole technique WebEx was attended by 265 staff representing 156 facilities.
- February 5 & 12, 2009 – Interdisciplinary Approach to Improving AVF Rates Learning Session. These learning sessions had presentations on AVF

maintenance, monitoring, and interventions, catheter reduction, and the interdisciplinary team approach and were held in Columbus, OH and Chicago, IL. These learning sessions were attended by 133 staff representing 109 facilities.

- February 24 & 26, 2009 - A WebEx presentation on AVF maintenance, monitoring, and interventions was attended by 80 participants representing 66 facilities.
- June 2 & 4, 2009 - Putting the Pieces Together Vascular Access Learning Session held in Chicago, IL and Indianapolis, IN. These learning sessions were attended by 96 participants representing 72 facilities.
- June 23, 2009 - Helping Patients Make Healthy Fistula Choices WebEx. This WebEx introduced a program developed by the Patient Leadership Committee based on motivational interviewing. This WebEx was attended by 117 participants representing 100 facilities.
- June 24, 2009 - Fistula Coaching Program (Peer to Peer) WebEx. This program was developed by the Patient Leadership Committee and trains and supports patients in

promoting fistula placement to patients that refuse. This WebEx was attended by 51 participants representing 50 facilities.

- June 29, 2009 - New fistula reimbursement information was distributed to medical directors and surgeons (emailed to 528 medical directors, mailed to 219 medical directors, mailed to 675 surgeons). This information was also incorporated through PowerPoint presentations to medical directors and surgeons and discussed in educational learning sessions and educational WebEx sessions.
- September 3, 2009 – Network staff presented at FMC quality meeting in Chicago and discussed role of the Network and issues surrounding vascular access management and outcomes.
- September 17 & 22, 2009 - “QAPI & Vascular Access Management I” WebEx providing best practice in vascular access management using QAPI. This WebEx was attended by 160 participants representing 151 facilities.
- October 1, 2009 – FFBI Web site redesign announcement (emailed to 582 VACs, mailed to 57 VACs, emailed to 528 medical

directors, mailed to 219 medical directors).

- October 9, 2009 – FFBI strategic plan announcement (emailed to 582 VACs, mailed to 57 VACs, emailed to 528 medical directors, mailed to 219 medical directors).
- October 20, 27, & 29, 2009 - Networking for Solutions Vascular Access Learning Session held in Chicago, Illinois, Louisville, Kentucky, and Cleveland, Ohio. Presentations included changing patient culture, community partnering and catheter reduction. These learning sessions were attended by 268 participants representing 174 facilities.
- November 16, 2009 - “Check Your Fistula Week” Campaign during this instructing facilities to send fistulas maturing >6 weeks for intervention. Shared best practice suggestions with campaign announcement and three reminders during the week. Emailed to 554 Medical Directors, 592 VACs, 647 Nurse Managers, and 418 Administrators.
- December 11 & 17, 2009 - Medical Director as Leader WebEx with content including medical director responsibilities and roles related to the conditions for coverage and QAPI best

practice. 134 Medical Directors attended representing 178 facilities.

- December 15 & 16, 2009 - Networking for Solutions Vascular Access Learning Session held in Indianapolis, Indiana. Presentations were on changing patient culture, community partnering and catheter reduction. These learning sessions were attended by 34 participants representing 32 facilities.
- Physician specific incident CKD patient vascular access data report were sent to nephrologists in July and December 2009. The information provided on this report is generated from the CMS 2728 Medical Evidence and Medicare Entitlement form and displays the percent of accesses a nephrologist’s patient were using when they began ESRD.
- The AVF Monthly Tracking Report was sent to VACs and medical directors monthly beginning in September 2009 displaying the facility prevalent fistula rate and showing their interim outcomes toward the final goal.

- Vascular Access Coordinators (VAC) were sent bi-monthly electronic newsletters listing vascular access management and QAPI resources and tools. Each newsletter had a different theme/topic presented.
- Medical director letters were sent in May and October 2009 providing information on vascular access outcomes and stressing the importance of improving processes.
- To promote Fistula First goals continuously, educational resources have been developed

which can be easily shared. The Fistula First page on the Network Web site was updated regularly adding the above mentioned materials as they were provided by mail or email. The materials provided to our stakeholders were developed both from Networks 9/10 and the national Fistula First Breakthrough Initiative.

- The Network has acted as a community outreach partner by providing information on Fistula First through conference calls quarterly to state surveyor groups and the quality improvement organizations.

## **2008-2009 Fistula First Completed Projects**

The following activities were designed as components of the 2008-2009 Fistula First quality improvement project and were completed in March 2009.

### **1. Vascular Access Program**

**Management** - Eighteen dialysis facilities with poor vascular access outcomes and which had communicated that they lacked a vascular access management program participated in an initiative designed to improve facility CQI processes. This project was part of the 2008-2009 Quality Improvement Work Plan (QIWP) for the Fistula First initiative.

Based on FF Change Concept #1, Routine CQI Review of Vascular Access, these facilities were instructed in July 2008 on the techniques of CQI and taught how to use a tool that MRB members developed to assist facilities with the collection and analysis of vascular access data. The tool collects patient level data including surgeon and nephrologist identifiers to

facilitate the reporting of fistula rates back to these individuals.

The facilities were instructed:

- to convene a vascular access multi-disciplinary team,
- to define a timeline for regular meetings,
- to conduct a facility root cause analysis to identify barriers to fistula placement and usage,
- to consider revise and implement improved policies and procedures,
- to collect data monthly, and,
- to report outcomes to the Network monthly.

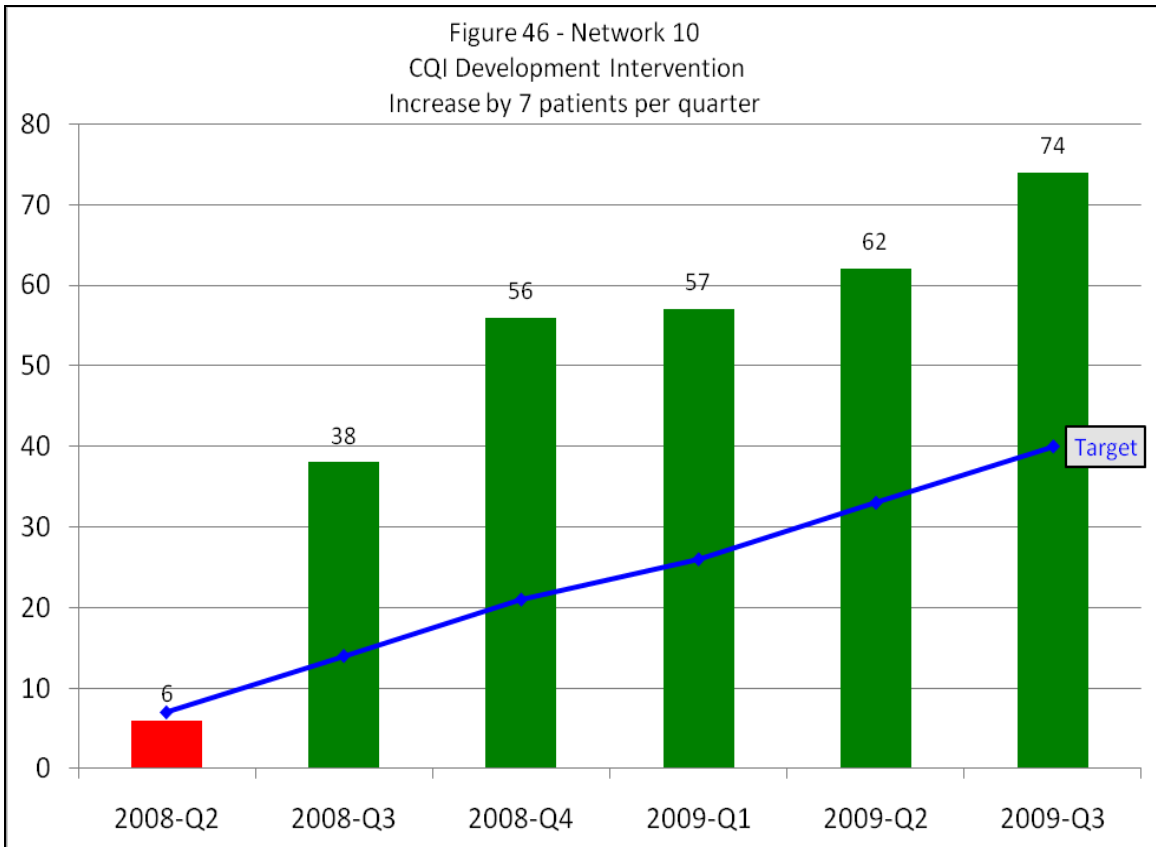
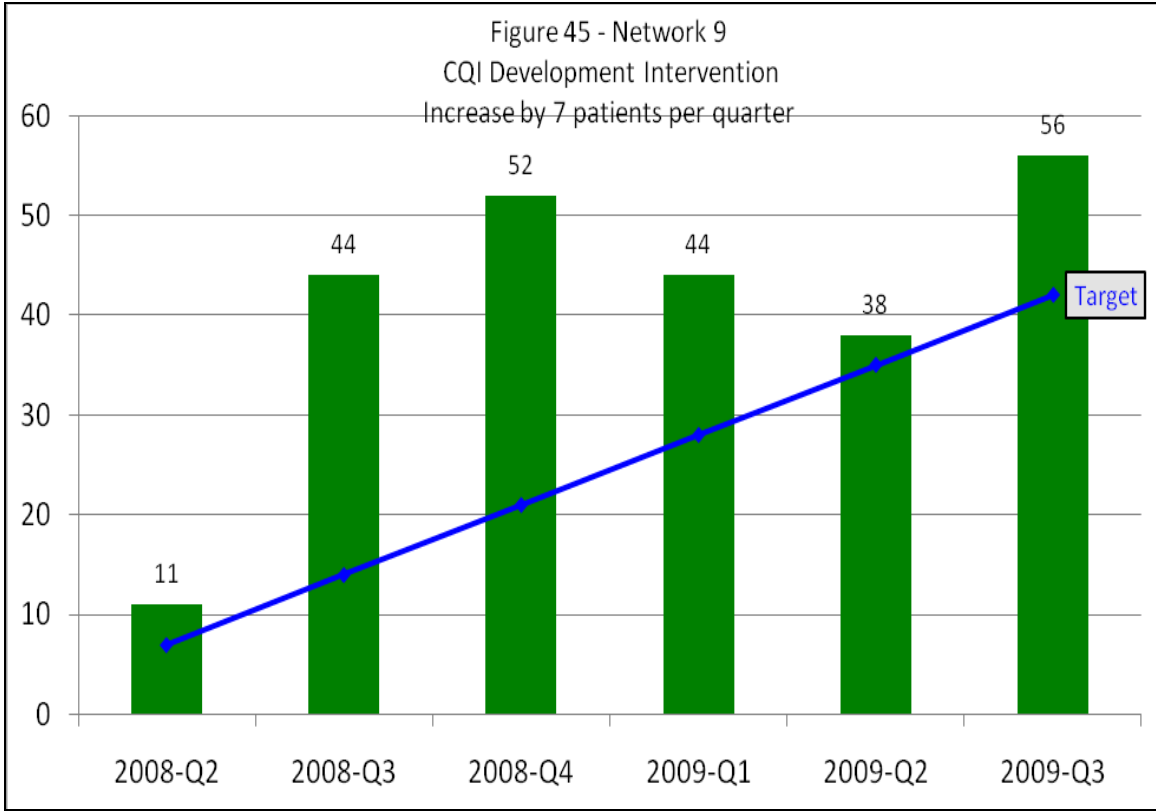
Goals and timeline for the Vascular Access Program Management project were:

- Network 9: to increase the number of prevalent patients with

a fistula by seven patients in each quarter for the duration of the project to attain a four percentage point increase by March 2009, a total of 28 patients.

- Network 10: to increase the number of prevalent patients with a fistula by seven patients in each quarter for the duration of the project to attain a four percentage point increase by March 2009, a total of 26 patients.

**Results:** The Vascular Access Program Management project was successful in both Networks 9 and 10. Both Networks met the goal that was set for March 2009 and continued to improve at the quarterly rate or better through September 2009. Figure 45 and Figure 46 display the results of this project at the end of the project, March 2009 and for six months after (September 2009) for Network 9 and Network 10.



**2. Identification of Vascular Access Coordinator (VAC) –** Newly appointed VAC staff members participated in a project that was part of the 2008-2009 Quality Improvement Work Plan (QIWP) for the Fistula First initiative. They were instructed to perform a root cause analysis using the tools and resources provided to them in a VAC tool kit. They were asked to identify facility barriers to fistula placement and usage and to develop intervention strategies. The VAC completed a project plan analysis to identify their plan to improve prevalent fistula rates; this information was submitted to the Network. The VACs were invited to attend a learning session or WebEx conference to learn about tools, resources and interventions to assist in improving vascular access outcomes. Sixty-nine out of 166 (42%) of the participating facilities were represented at a learning session or WebEx. Finally, the VACs reported their progress quarterly by submitting an updated project plan to Network staff.

Goals and timeline for the Vascular Access Coordinator project were:

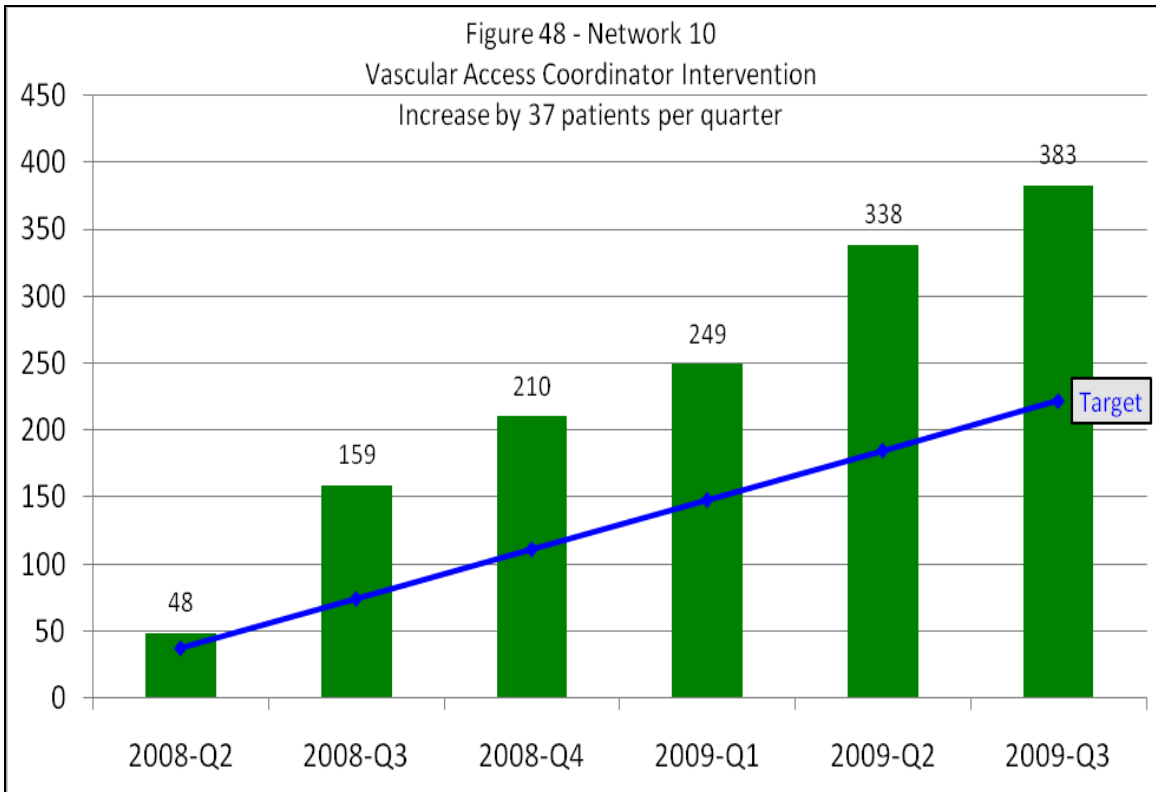
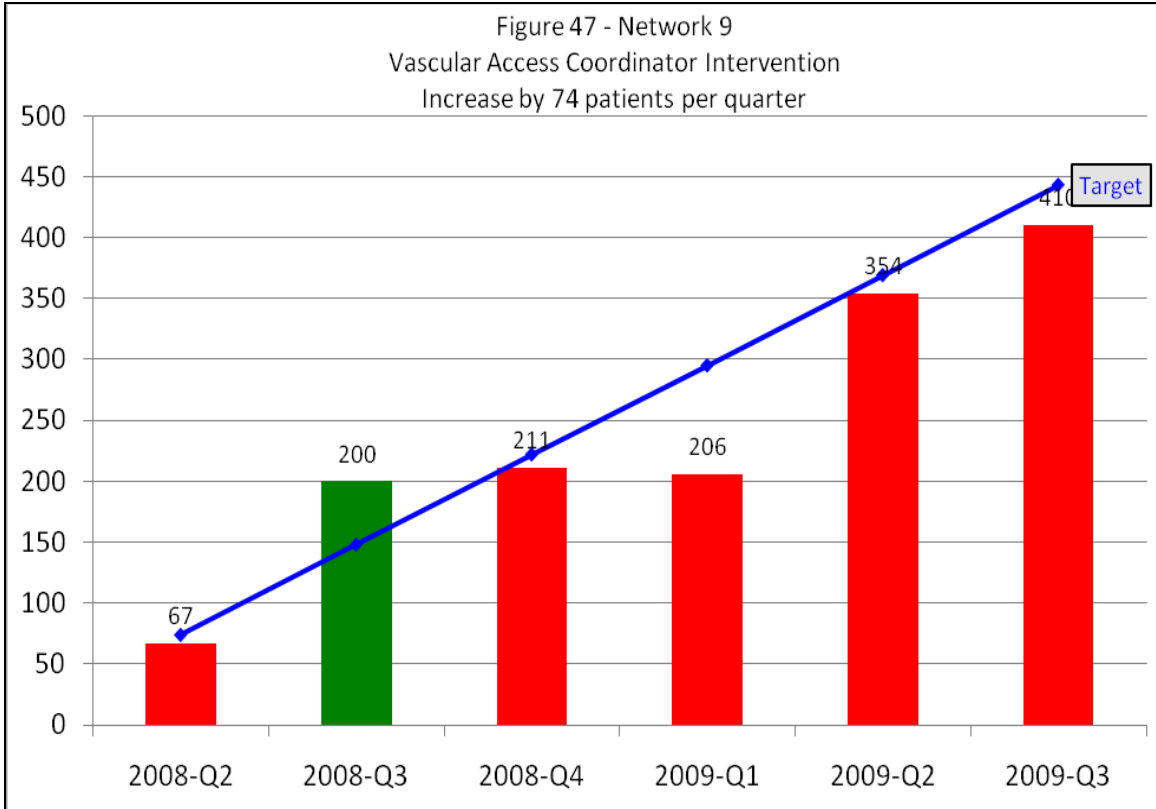
- Network 9: to increase the number of prevalent patients with a fistula by 74 patients in each

quarter for the duration of the project to attain a four percentage point increase by March 2009, a total of 295 patients.

- Network 10: to increase the number of prevalent patients with a fistula by 37 patients in each quarter for the duration of the project to attain a four percentage point increase by March 2009, a total of 148 patients.

**Results:** The Vascular Access Coordinator project was successful in Network 10 but fell short in Network 9. Network 10 met the goal that was set for March 2009 and continued to improve at the quarterly rate or better through September 2009. Network 9 improved but not at the quarterly rate that was set as goal.

Figure 47 and Figure 48 display the results of this project at the end of the project, March 2009 and for six months after (September 2009) for Network 9 and Network 10.



### **3. Regional Physician Learning**

**Sessions** - Physicians from specific physician practice groups in central Indiana and southwestern Illinois were asked to participate in Learning Sessions as part of the 2008-2009 Quality Improvement Work Plan (QIWP) for the Fistula First initiative.

Program content was designed by Network staff and MRB members, including the following topics:

- facility data including trends and regional comparisons
- physician specific data
- routine CQI techniques
- best practices in fistula placement and usage
- process change tools and resources
- surgical and interventional techniques for AVF placement and use
- networking with mentor facilities

The Learning Sessions were designed to increase physician leadership, commitment and involvement in fistula prevalence quality improvement and to encourage facility adoption of policies and procedures for improved vascular access management. A total of 22 dialysis facilities participated in this intervention. All of the facility medical directors were

present at the learning session along with one area surgeon, three Fresenius Medical Care (FMC) corporate representatives, one Diversified Specialty Institutes (DSI) corporate representative, and one area vascular access clinic representative. These facilities were contacted monthly to evaluate changes that were taking place following the learning session. The AVF rates provided through the Fistula First Dashboard were monitored monthly. The medical directors of facilities that did not demonstrate change and/or AVF rate improvement were notified by the VAAP chair to review vascular access processes, discuss facility barriers and develop an assessment of needed improvements.

Goals and timeline for the Regional Physician Learning Session project were:

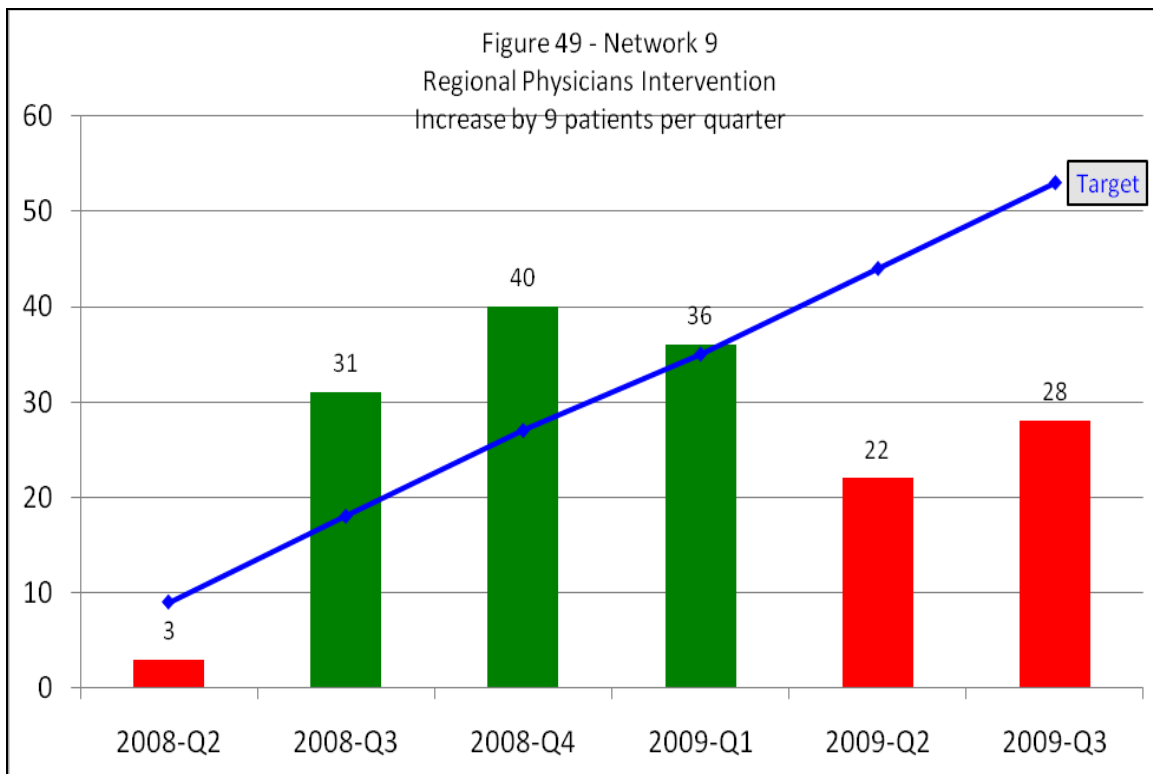
- Network 9: to increase the number of prevalent patients with a fistula by nine patients each quarter for the duration of the project to make a four percentage point increase by March 2009, for a total of 35 patients.
- Network 10: to increase the number of prevalent patients with a fistula by five patients each quarter for the duration of the project to make a four percentage

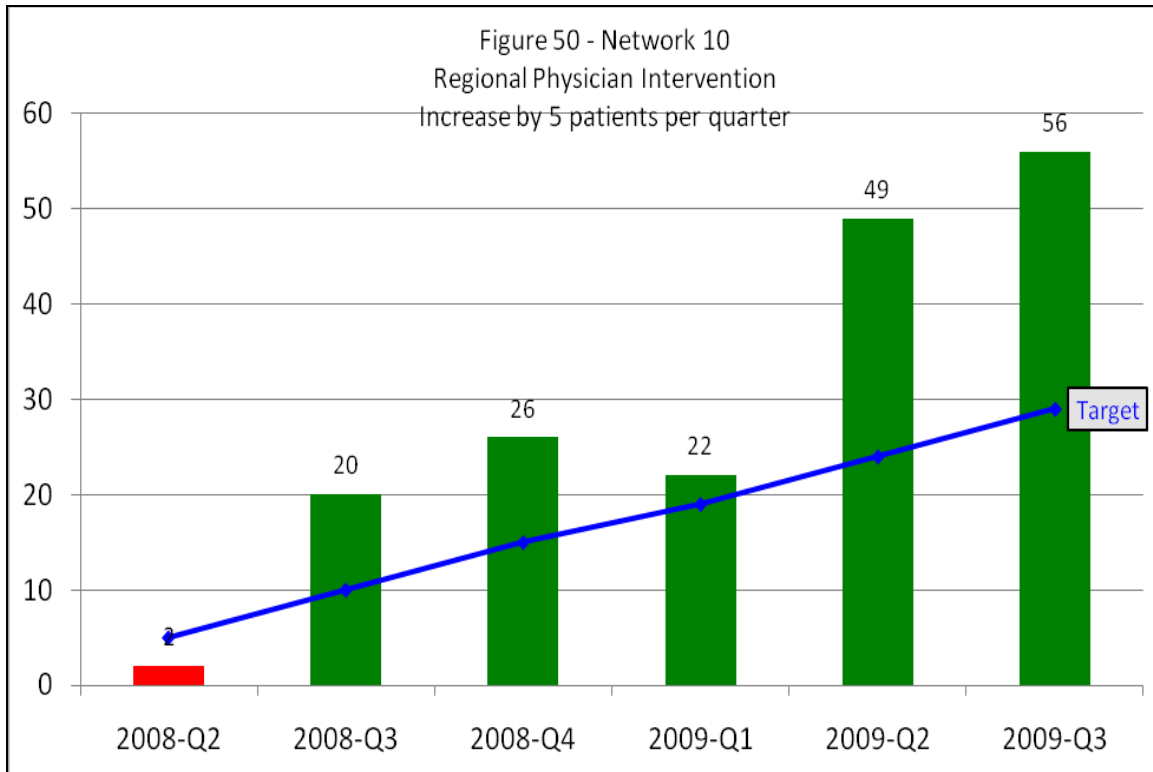
point increase by March 2009, for a total of 19 patients.

**Results:** The Regional Physician Learning Session project was successful in meeting the March 2009 goal in both Networks 9 and 10. While Network 10 continued to improve at the quarterly rate or better for the next two quarters,

Network 9 decreased the number of fistulas placed.

Figure 49 and Figure 50 display the results of this project at the end of the project, March 2009 and for six months after (September 2009) for Network 9 and Network 10.





**4. Fistula Surveillance** - Based on the Fistula First March 2008 Dashboard data, 24 dialysis facilities had at least 20 percent of their “fistula placed” patients dialyzing with either a catheter or graft. These data suggest a lack of appropriate fistula management. Proper management would ensure a mature fistula which, in turn, improves overall fistula rates for the Network. These 24 dialysis facilities participated in a project as a part of the 2008-2009 Quality Improvement Work Plan (QIWP) for the Fistula First initiative.

Resources and tools based on Fistula First Change Concept #9, Monitoring, Surveillance and the Failing AV, were provided to the facilities which were determined to be in need of assistance. The facilities completed a questionnaire designed to identify the facility barriers to fistula maturation in patients with placed fistulas and provided an action plan to the Network. The facilities provided data monthly using a data collection tool to identify patient level fistula rates by physician and surgeon. The facilities were instructed to utilize the specific physician and surgeon data in the CQI activities as a comparison

reporting tool. Facility staff members, including the VAC, medical director and surgeon, were asked to attend one learning session in September/October/ November 2008 to discuss barriers to appropriate fistula placement and best practice models. Thirteen of the twenty four participating facilities were represented at the learning session.

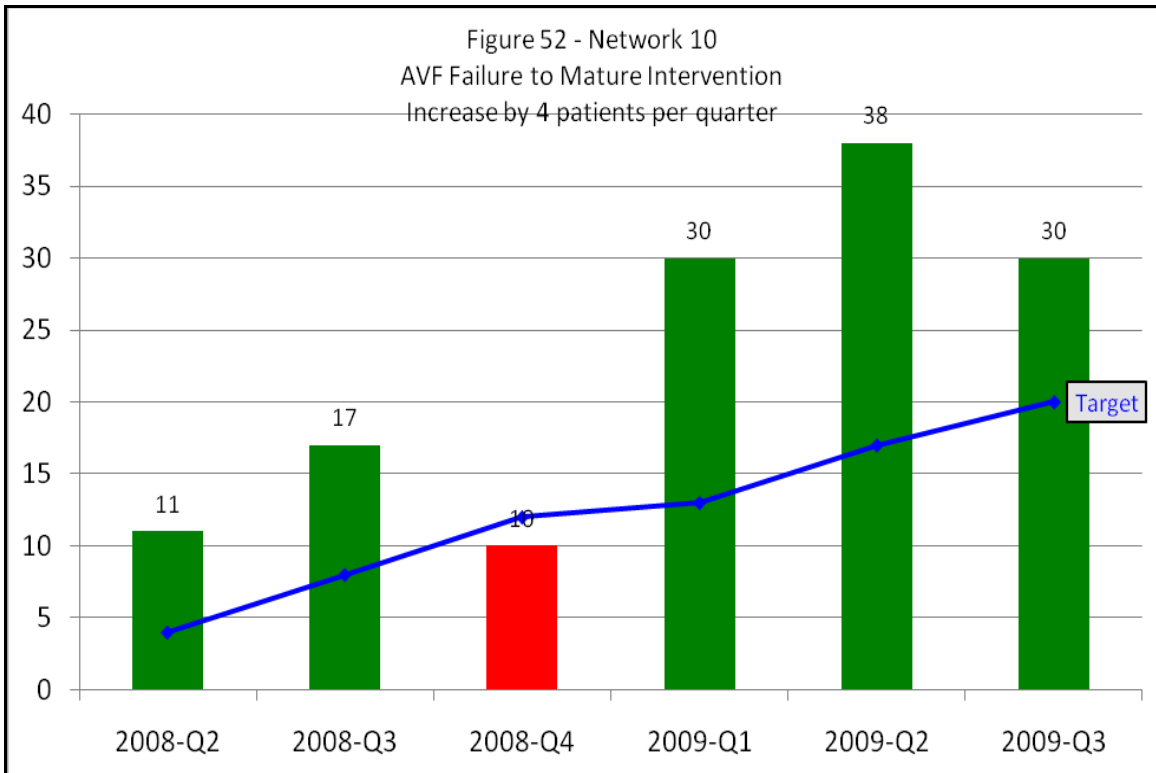
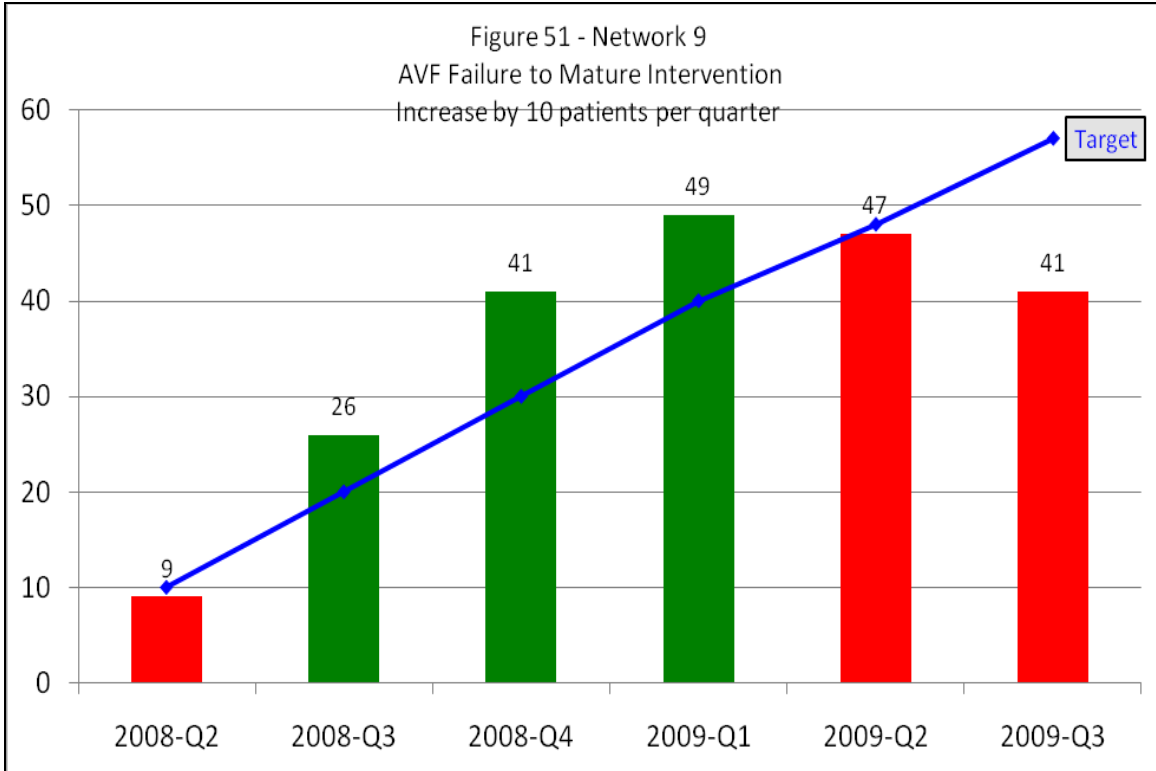
Goals and timeline for the Fistula Surveillance project were:

- Network 9: to increase the number of prevalent patients with a fistula by 10 patients for each quarter of the project to make a four percentage point increase by March 2009, a total of 38 patients.
- Network 10: to increase the number of prevalent patients with

a fistula by four patients for each quarter of the project to make a four percentage point increase by March 2009, for a total of 13 patients.

**Results:** The Fistula Surveillance project was successful in meeting the March 2009 goal in both Networks 9 and 10. While Network 10 continued to improve at the quarterly rate or better for the next two quarters, Network 9 decreased the number of fistulas placed.

Figure 51 and Figure 52 display the results of this project at the end of the project, March 2009 and for six months after (September 2009) for Network 9 and Network 10.



## **5. Chronic Catheter Reduction -**

The following activities were designed as components of the quality improvement project to reduce the use of chronic catheters.

Reducing catheters, FF Change Concept #7, AVF Placement in Patients with Catheters Where Indicated, was being targeted by the national Fistula First Breakthrough Initiative in 2008-2009. Nine dialysis facilities in Network 9 and nine dialysis facilities in Network 10 participated in a quality improvement project that was part of the Facility-Specific Quality Assessment and Improvement Projects (QAIPs) of the 2008-2009 Quality Improvement Work Plan (QIWP). These targeted facilities had a chronic catheter rate of  $\geq 20$  percent based on March 2008 data.

Facility staff received the tools and resources on policy and procedure development provided through FFBI for Change Concept #7, AVF Placement in Patients with Catheters Where Indicated, by email and through learning sessions. Facility staff members were asked to attend scheduled learning sessions. Topics included best practice models, and a discussion of data describing patient and facility infection, hospitalization and mortality rates related to increased chronic catheter usage.

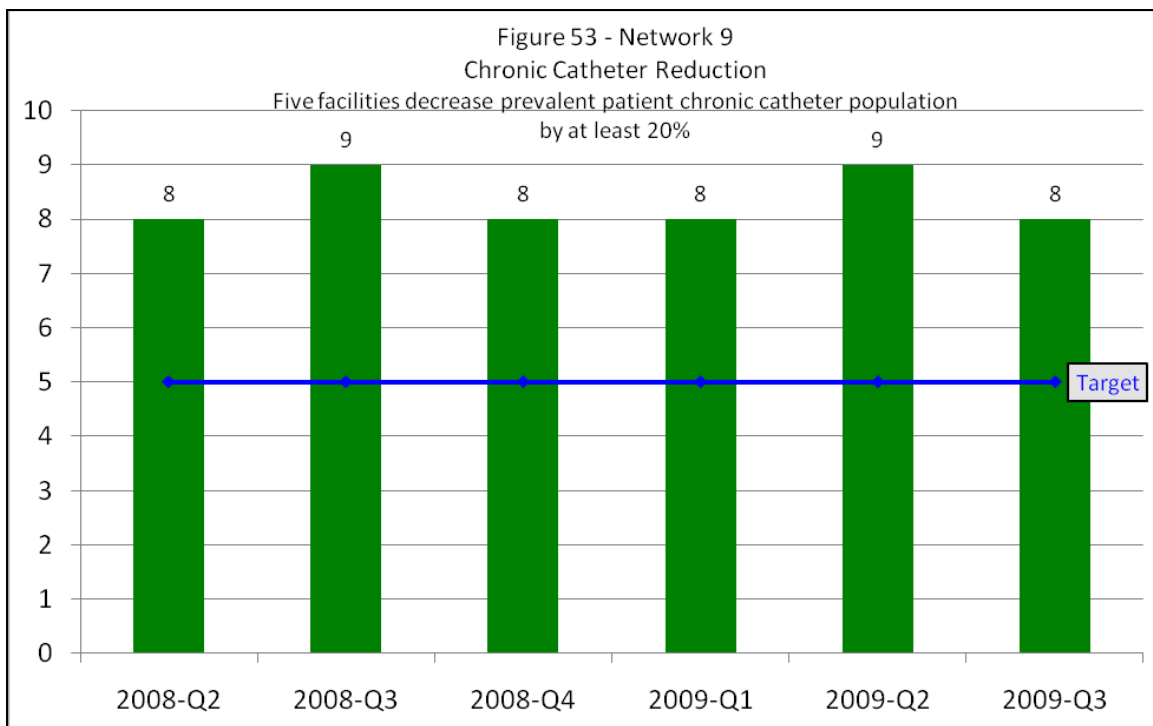
Facility staff members received emailed instruction on utilizing the vascular access quality improvement data collection tool so that information can be collected and reviewed internally on a monthly/quarterly basis. Network staff was available to answer questions related to the collection tool. Facility staff members submitted data monthly to the Network and received feedback reports with comparison outcomes

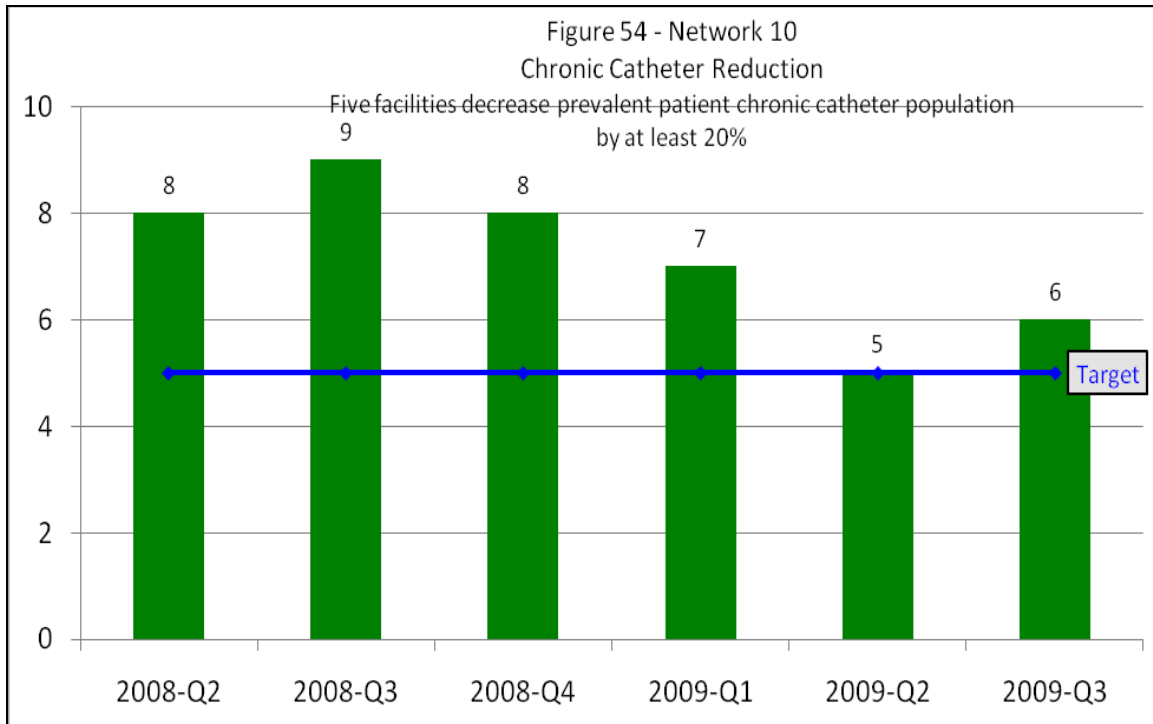
Facility staff members received instruction by email on using the vascular access quality improvement template, including the vascular access needs assessment. Both were designed to provide a structure for a vascular access management program. Network staff was available to answer questions on the QI template. Facility staff members submitted a facility barriers questionnaire and an action plan to the Network. Facility staff members were asked to attend scheduled learning sessions. Topics included best practice models and QAPI development to assist in catheter tracking resulting in AVF placement.

Goals and timeline for the Chronic Catheter Reduction project were:

- Network 9: at least five of the targeted facilities (n=9) will decrease their prevalent patient chronic catheter population by a minimum of 20 percent by March 31, 2009.
- Network 10: at least five of the targeted facilities (n=9) will decrease their prevalent patient chronic catheter population by a minimum of 20 percent by March 31, 2009.

**Results:** The Chronic Catheter Reduction project was successful in both Networks 9 and 10. Both Networks met the goal that was set for March 2009 and sustained improvement through September 2009. Figure 53 and Figure 54 display the results of this project at the end of the project, March 2009 and for six months after (September 2009) for Network 9 and Network 10.





Neither Network 9 nor Network 10 met the March 2009 goal that was set by CMS. The Network 9 goal was 48.8% but only achieved 47.8%. The Network 10 goal was 50.3% but only achieved 49.3%. An extensive analysis of the projects was completed.

The overall performance of the projects was greater than expected and resulted in a small negative variance from goal. The facilities that were not targeted for intervention received a vascular access report quarterly. The report was sent to the facility medical director, administrator, nurse manager, and VAC. These facility representatives were told to utilize the information in the report for

quality improvement initiatives to improve fistula outcomes. Historically this group had an increase in fistulae at 4.52 percentage points annually over the last four years. Our expectations were that this group would continue to increase and that this increase in fistulae for the current work would be at least 4.0 percentage points.

The non-intervention group in Network 9 increased by only 1.54 percentage points and the non-intervention group in Network 10 increased by only 1.89 percentage points. It was determined that the reliance of the Fistula First QIP on continued increases in the non-intervention facilities resulted in the negative variance observed. The

vascular access quarterly report alone did not give the non-intervention facilities enough incentive to sustain the fistula improvements from the past four years.

**6. Fistula First Quality Award:** In 2005, The Renal Network established an award designed to recognize leaders of the Fistula First Initiative and provide them with a platform from which they can share their knowledge as mentors to other dialysis providers. Application for this award is voluntary and is viewed as a way for any group or individual to be recognized by providing performance processes and results in the area of placement and usage of AVF.

The goal of this award is to demonstrate performance outcomes above standards in the area of promoting AV fistula and vascular access management related to the FF Initiative. The award criteria were developed using the 11 Change Concepts of the CMS National Fistula First Initiative along with the K-DOQI guidelines.

#### **Fistula First 11 Change Concepts**

1. Routine CQI review of vascular access.
2. Timely referral to nephrologist

Future Fistula First initiatives will have to be developed to have a greater impact on those facilities that are not targeted for intervention.

3. Early referral to surgeon for “AVF only” evaluation and timely placement.
4. Surgeon selection based on best outcomes, willingness, and ability to provide access services.
5. Full range of appropriate surgical approaches to AVF evaluation and placement.
6. Secondary AVF placement in patients with AV grafts.
7. AVF placement in patients with catheters where indicated.
8. Cannulation training for AV fistulas.
9. Monitoring and maintenance to ensure adequate access function.
10. Education for care givers and patients.
11. Outcomes feedback to guide practice.

This performance award is defined by criteria that demonstrate rapid, sustainable improvement defined by

a time-specific aim, and quantitative measures to display improvement and identification of process changes that lead to project advancement. Winners are selected based on a voluntary application that describes their processes to place and maintain fistula and decrease catheters, as well as program outcomes. Winners are announced at the annual meeting of the Network Council and are used as mentors for educational activities.

In 2008, in memory of Dr. Richard Breitenfield, a quality champion in Network 9, the title of the award was changed to the "Dr. Richard Breitenfield Quality Award." Three designations of achievement were delineated.

- Bronze Award: Prevalent AVF 54-59%
- Silver Award: Prevalent AVF 60-65%

- Gold Award: Prevalent AVF  $\geq$  66%

Six facilities filed applications for the 2009 Dr. Richard Breitenfield Quality Award. All of the award applicants had outcomes greater than their Network prevalent fistula rate and had put processes into place that helped them achieve superior results. A volunteer panel consisting of members of the MRB and VAAP reviewed the applications.

All six of the applicants were recognized with an award by meeting the outcomes designation they applied for and were able to extensively describe each process that assisted in their great outcomes. Three facilities were chosen for Gold, two facilities were chosen for Silver, and one facility was chosen for Bronze based, on their outcomes and the processes used to achieve them