

*Southern California Renal Disease Council, Inc.
ESRD Network 18*

< 55% AV Fistula Project

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2010-2011 Quality Improvement Project

WebEx Conference

Los Angeles, CA

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Special Acknowledgement for Slide Content Contribution:

- **Fistula First Breakthrough Initiative Website**
- **Mid-Atlantic Renal Coalition (FFBI: Presentation to CMS/ESRD-Annual Meeting)**
- **CMS Surveyor Training (Condition: Quality Assessment and Performance Improvement – Show Me The Progress)**



Fistula First Breakthrough Initiative (FFBI)

- The FFBI is a collaboration between the Centers for Medicare and Medicaid Services (CMS), ESRD Networks, and the renal community.

- Began in 2003.

- Main Objective:
 1. To have every eligible patient receive the most optimal form of vascular access – AV fistula.
 2. To ensure every vascular access undergo appropriate monitoring and surveillance to avoid vascular access complications



Fistula First AV Fistula Goals

- CMS Prevalent AVF Goal = 66%

- Network 18 2010-2011 AVF Goal:
 - Network 18 Goal = 60.3%
 - Network 18 Stretch Goal = 61%

- Current AVF Rate:
 - National = 56.2% (July 2010)
 - Network 18 = 59.9% (July 2010)



Tools & Best Practices: Fistula First Change Concepts

1. Routine CQI – Review of vascular access.
2. Timely referral to nephrologist.
3. Early referral to surgeon for “AVF Only”.
4. Surgeon Selection
5. Full range of appropriate surgical approaches.
6. Secondary AVFs in AVG patients.
7. AVF evaluation/ placement in catheter patients.
8. Cannulation training.
9. Monitoring & maintenance.
10. Education.
11. Outcomes feedback.
12. Modify hospital systems.
13. Patient self-management.



Cost Per Patient by Access Type (USRDS 2008 data)

- Annual per patient per year expenditure:
 - Catheter \$90,110
 - Graft \$79,337
 - Fistula \$64,701

- Annual per patient per year access event costs:
 - Catheter \$6,402
 - Graft \$8,683
 - Fistula \$3,480



Network 18 activities to promote & support Fistula First

- Monthly data collection
 - Electronically by LDOs (DaVita & FMC).
 - Manual submission by Independent & SDOs.

- Distribute quarterly feedback reports
(Facility-specific reports, SIMS reports, and Network summary reports.)

- Sharing best practices via Fistula First/Network Newsletter, project conference calls and activities.



Network 18 activities to promote & support Fistula First (continued)

- Provide current educational information relevant to professionals and patients on the Network 18 website and through mailings or faxes.
- Work with the MRB to develop projects to assist identified facilities in improving vascular outcomes.
- Telephone follow-up or site visits.



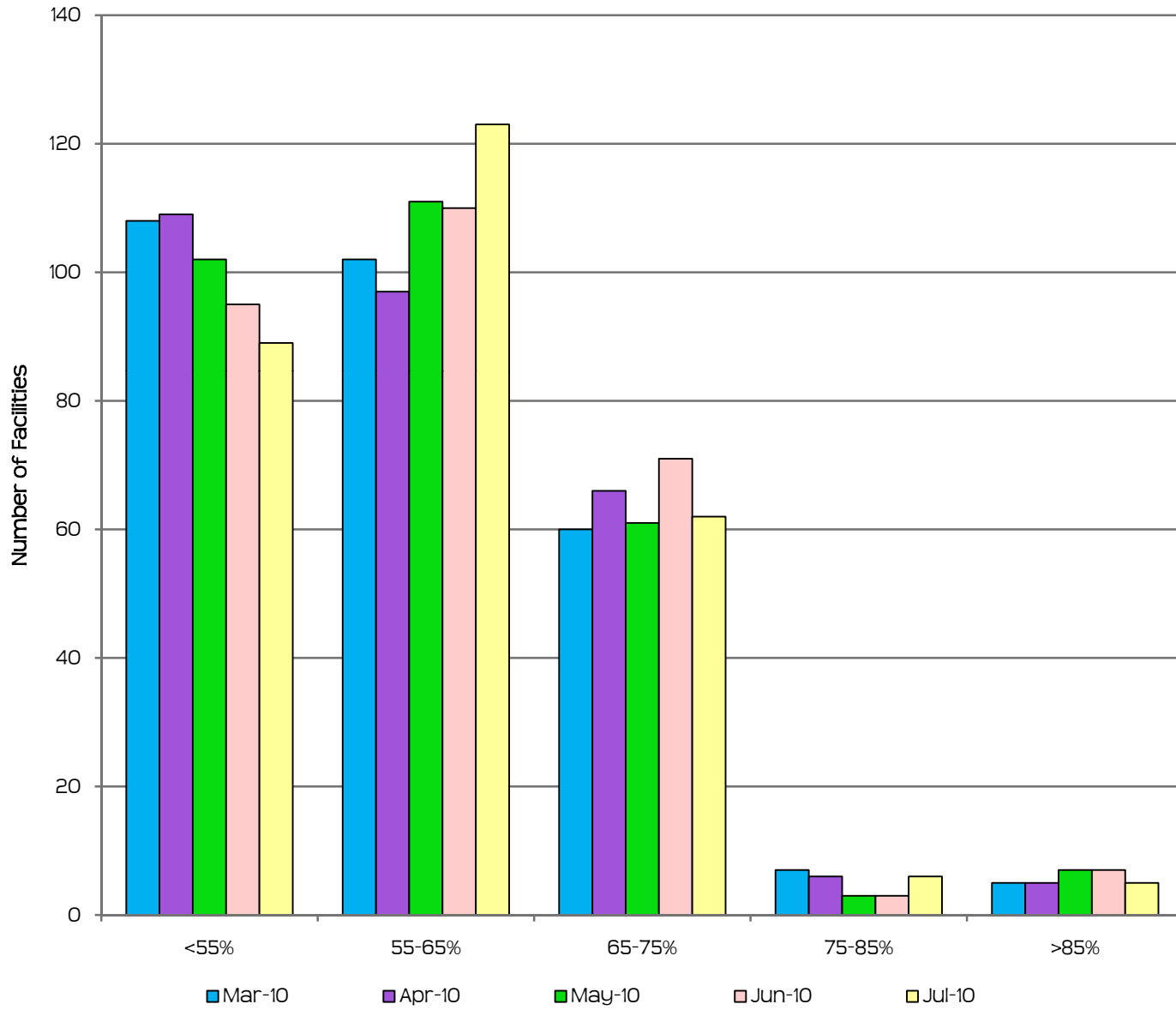
Network 18 AVF Rate Breakdown

- Facilities with AVF rate $> 55\%$ = 68.8%
(196 facilities – as of July 2010)
 - 123 facilities = 55-65%
 - 62 facilities = 65.1-75%
 - 6 facilities = 75.1-85%
 - 5 facilities = $> 85\%$

- Facilities with AVF rate $< 55\%$ = 31.2%
(89 facilities – as of July 2010)



Network 18 AVF Precentile Breakdown



*QAPI Project:
< 55% AV Fistula Project*



< 55% AV Fistula Project

Inclusion criteria for the project:

- AVF rate < 55%.
- Facility census > 50 patients.
- Facility did not participate in any Fistula First project last year.
- Facility has not shown improvement in AVF rate of at least 2 percentage points within the last year.
- Facility has been open for the last year.



< 55% AV Fistula Project (continued)

Objective:

- To have each project facility review their vascular access program and determine root causes(s) for their facility's AVF rate being < 55%.
- Each facility will develop a Quality Assessment and Performance Improvement (QAPI) Plan to improve their AVF rate based on their root cause analysis.
- Implement their plan and revise their plan along the way as necessary to ensure achievement of their goal.
- Develop a process to sustain improvements.



< 55% AV Fistula Project (continued)

Goal:

Facility Goal:

Each facility will improve their AVF rate by at least 3.1 percentage points by March 2011.

Group Goal:

To achieve a 53.4% AVF rate by March 2011.

Baseline: June 2010 SIMS data

Timeline: Project cycle: October 2010 – March 2011



< 55% AV Fistula Project (continued)

Due Dates:

- Facility Manager Acknowledgement Letter –
September 27, 2010
- Medical Director Acknowledgement Letter –
September 27, 2010
- **Quality Assessment and Performance Improvement Plan (QAPI) - [PDSA: Plan-Do-Study-Act format – Step 1] - *November 5, 2010***
- QAPI : Final (Steps 2-4) – at the end of the project



< 55% AV Fistula Project (continued)

Conference Calls:

- Bi-monthly (every other month) calls to share best practices, discuss concerns/issues and discuss possible strategies/activities to improve AVF rates.
- Calls will be scheduled on the 1st Wednesdays of the call month.
 - November 3, 2010 @ 2-3pm
 - January 5, 2011 @ 2-3pm
 - March 2, 2011 @ 2-3pm

Please have a representative from your facility present at each call.



< 55% AV Fistula Project (continued)

Network Responsibilities:

- Project leader.
- Instruct/assist with QI process.
- Distribute templates for RCA and QAPI (PDSA format).
- Distribute tools and resources and evaluate their usefulness.
- Facilitate conference calls.



< 55% AV Fistula Project (continued)

Network Responsibilities (continued):

- Provide monthly feedback reports (SIMS).
- Provide technical assistance as necessary.
- Conduct follow-up via telephone or site visits as necessary.
- Monitoring the facility's and the group's progress.



< 55% AV Fistula Project (continued)

Facility Responsibility:

- Conduct a root-cause analysis and develop a QAPI plan with facility's Interdisciplinary Team.
 - Submit a copy of the QAPI plan to the Network.
- Implement the QAPI plan and revise as necessary during the project to achieve goal.
- Monitor your progress towards achieving your goal.



< 55% AV Fistula Project (continued)

Facility Responsibility (continued):

- Identify tools/resources that would be useful for your facility and utilize them.
- Participate in bi-monthly (every other month) conference calls.
- Follow project timelines and due dates.
- Submitting requested documents for the project in a timely manner.



< 55% AV Fistula Project (continued)

Participation in the project is mandatory.

Condition for Coverage: 494.180 – Condition: Governance

“Each facility must participate in ESRD Network activities and pursue Network goals.”

Interpretive Guidelines: V772

“The ESRD facility must respond promptly within any specified deadlines to requests for information, data, or corrective action plans from its ESRD Network. The facility must participate in Network projects and activities aimed at addressing identified needs and improving quality of care in the individual facility or the Network-wide area.”



*Quality Assessment and
Performance Improvement
(QAPI) Plan*



Quality Assessment and Performance Improvement Plan (QAPI)

494.110: (V626) Condition

*The dialysis facility must **develop, implement, maintain and evaluate** an effective, **data driven**, quality assessment and performance improvement program with participation by the professional members of the **interdisciplinary team**.*



Quality Assessment and Performance Improvement Plan (QAPI) (continued)

- Interdisciplinary Team: (minimum)
 - Physician
 - Registered nurse
 - Social Worker
 - Dietitian

- Also include your surgeon(s) and interventional radiologist(s)

- Vascular Access Coordinator/Manager



Quality Assessment and Performance Improvement Plan (QAPI) (continued)

Standard: Program Scope:

- 1. The program must include, but not limited to, an ongoing program that achieves measurable improvement in healthcare outcomes and reduction of medical errors by using indicators or performance measures associated with improved health outcomes and with the identification and reduction of medical errors.*



Quality Assessment and Performance Improvement Plan (QAPI) (continued)

Standard: Program Scope:

- 2. The dialysis facility must measure, analyze, and track quality indicators or other aspects of performance that the facility adopts or develops that reflect processes of care and facility operations.*



Quality Assessment and Performance Improvement Plan (QAPI) (continued)

Standard: Monitoring performance improvement:

The dialysis facility must continuously monitor its performance, take actions that result in performance improvements, and track performance to ensure that improvements are sustained over time.



Quality Improvement Process

RCA (Root-Cause Analysis)

PDSA (Plan-Do-Study-Act)



Quality Improvement Process (continued)

The quality improvement (QI) process involves:

- Defining the problem
- Investigating through gathering evidence
- Identifying root causes
- Implementing solutions
- Monitoring those solutions to ensure they continue to prevent the original problem.



Quality Improvement Process (continued)

Quality improvement is a continuous cycle of planning, implementing strategies, evaluating the effectiveness of these strategies and reflection to see what further improvements can be made.



Quality Improvement Process

Root Cause Analysis:

Finding the real cause of the problem and dealing with it rather than simply dealing with the symptoms.

- Those situations which are recurring with the greatest frequency and consume the greatest amount of resources to rectify are candidates for RCA.
- To find the root cause, ask “Why?” until the pattern completes and the cause of the difficulty in the situation becomes rather obvious.

Gene Bellinger 2004



Quality Improvement Process (continued)

Root Cause Analysis:

- Root cause analysis can use a variety of techniques to uncover root causes, including cause mapping, change analysis, the [Ishikawa fishbone diagram](#), [5 Whys](#), and others.
- All are designed to analyze the elements affecting a particular outcome to determine the root causes.



Quality Improvement Process (continued)

Fishbone Diagram

(aka: Cause and Effect Diagram)

- The fishbone diagram will help to visually display the many potential causes for a specific problem or effect.

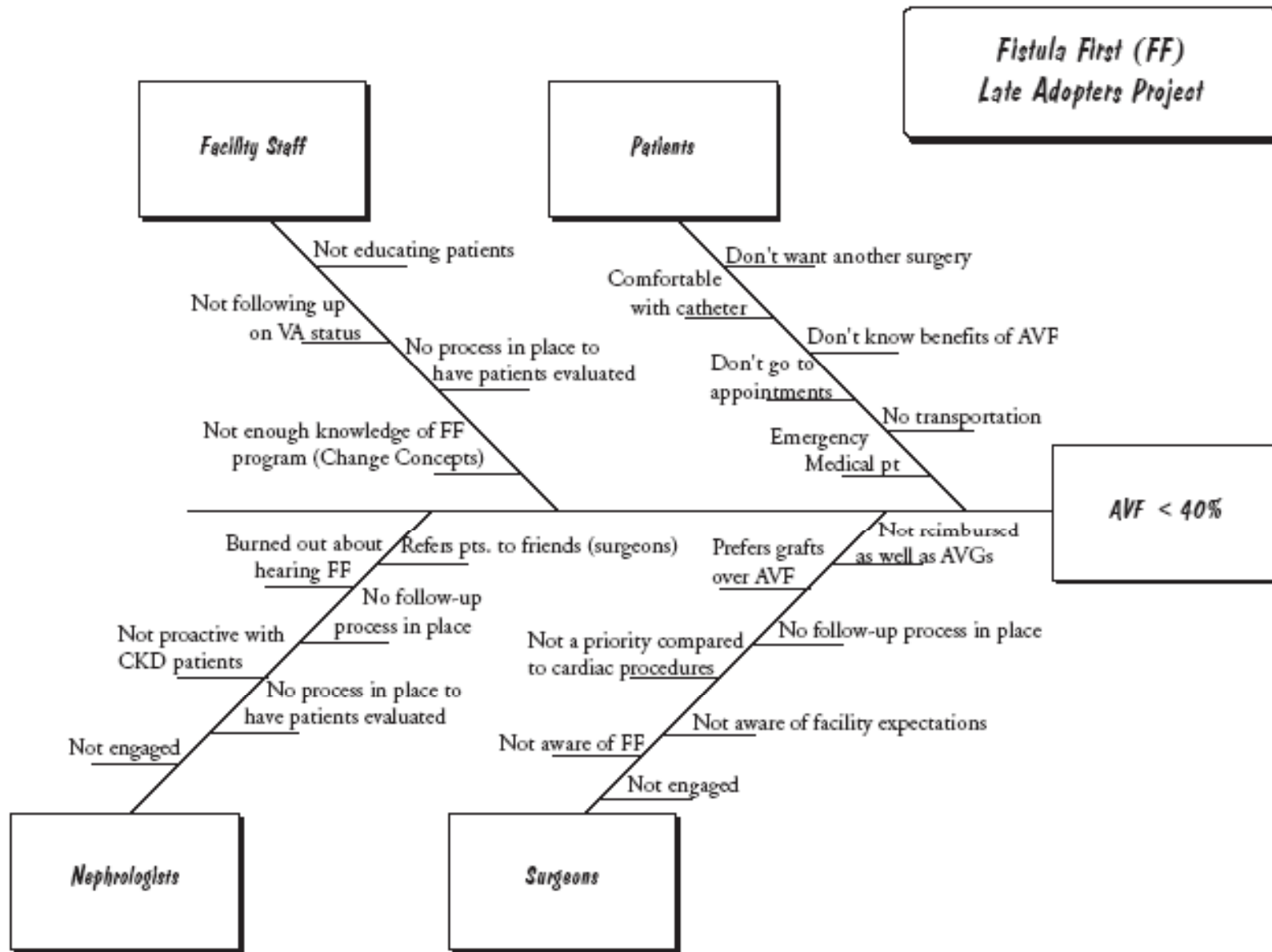


Quality Improvement Process (continued)

Fishbone Diagram (continued)

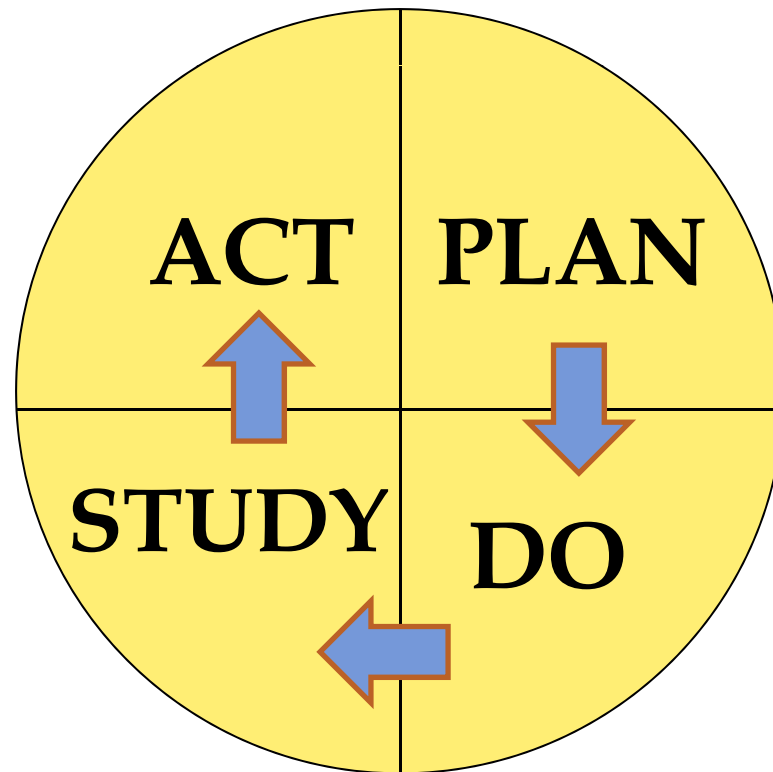
- The Cause-and-Effect diagram can be used by individuals or teams - most effective by a group.
- The team assists by making suggestions of possible causes until no more causes can be suggested.
- Once the entire fishbone is complete, a team discussion takes place to decide what are the most likely root cause(s) of the problem.





Plan-Do-Study-Act (PDSA):

PDSA is the format the Network uses for developing a QAPI plan.



Quality Improvement Process (continued)

- PDSA approaches promote action by getting clinicians to reflect and brainstorm strategies that they hope will lead to improvement.
- It also promotes evaluation of these changes once the strategies have been implemented.



Quality Improvement Process (continued)

PDSA is a cycle of improvement that involves asking three key questions:

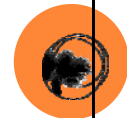
1. What are we trying to accomplish?
2. How will we know that a change is an improvement?
3. What changes can we make that will result in an improvement?



Quality Assessment and Performance Improvement (QAPI) Plan

Cycle (Dates of the project):

<p>Adopted from IHI Website, June 2007</p>	<p>Project:</p> <p>TEAM: Facility Name & Provider # (List all members)</p> <p>BACKGROUND: (Summary of facility’s identified problem and description of what the facility has been doing to improve the problem in the past – root cause analysis (RCA) will assist with finding out where the problem(s) are.)</p>
<p>Step 1. PLAN: Plan/develop the test.</p>	<p>Problem Statement: (Statement outlining the root cause)</p> <p>AIM Statement: (Statement designed to guide you to your goal.)</p> <p>What is the goal? (Include a numeric goal to achieve.)</p> <p>Develop a plan to achieve the goal? (List steps of the plan – this will allow you to identify the step that may need modifying/revising if necessary.) Add more paper if necessary.</p> <p>What data sources are needed for the test? (What data sources will you be using to monitor your progress?)</p> <p>What measures are used to analyze if you are achieving the goal? Baseline: _____</p> <p>Measure: (Numerical formula – i.e. numerator/denominator = %)</p> <p>Monitoring frequency:</p>



<p>Step 2. <u>DO:</u> Try out the test on a</p>	<p>Implement the plan. <u>Document problems and unexpected observations.</u></p>
<p>Step 3. <u>STUDY:</u></p>	<p>Analyze the results and compare the results with your goal.</p>
<p>Step 4. <u>ACT:</u> Determine if the test was successful or the plan needs to be revised.</p>	<p>If the test was successful, how will you implement the plan on a wider scale?</p> <p>If it was not successful, what needs to be changed based on what you have learned? Should you continue to search for other root causes?</p>



Plan-Do-Study-Act (PDSA)

Plan:

- Develop a Problem Statement
- Develop an AIM Statement
- Set goals to achieve (numerical goals and a target date)



Plan-Do-Study-Act (PDSA)

Plan (continued):

- Develop your plan on how you will improve your identified problem
- List data sources you will use to monitor your progress for the project



Plan-Do-Study-Act (PDSA) (continued)

Plan (continued):

Write out the measure you will be using to analyze if you are achieving your goal. (numerical formula)

of patients using AVF as primary access = AVF rate
Total # of patients at the facility



Plan-Do-Study-Act (PDSA) (continued)

Plan (continued):

- Note your baseline for comparison towards your goal
- Note the frequency in which you will conduct measurement of your progress



Plan-Do-Study-Act (PDSA) (continued)

Do:

- Implement your plan
- Document problems and unexpected observations of your plan

Study:

- Analyze the results and compare it to the goal
- This analysis should be conducted with the interdisciplinary team.
- Revise plan if necessary to achieve goal



Plan-Do-Study-Act (PDSA) (continued)

Act:

- Is your plan successful?
- How will you ensure continued improvement?
- If it wasn't successful, what needs to be changed based on what you have learned?
- Should you continue to search for other root causes?



Plan-Do-Study-Act (PDSA) (continued)

Act:

- The PDSA cycle is a continuous cycle. It allows you to frequently assess your plan and make revisions as necessary to achieve your goal.
- Your plan should be reviewed at least monthly and/or when you realize that your strategy or activity is not working.



Plan-Do-Study-Act (PDSA) (continued)

Act:

- You can go back to any step and revise as necessary.
- Note your progress on your form so that you have a record of the strategies/activities you've attempted and results of those attempts as well as the revisions you have made to improve your plan.



Tools & Resources



VASCULAR ACCESS ROOT CAUSE ANALYSIS TOOL

If your facility has decreased in the percentage of AVFs or has not improved – please consider the questions below. **This is a tool designed to assist your facility in conducting a root cause analysis by determining possible reasons for declining AVF rates or non-improvement in AVF rates.**

AREAS/ELEMENTS TO CONSIDER:	YES	NO	IF "NO" - REASON(S)	RATIONALE
MANAGEMENT				
Does your facility have stable management?				Stable management is a necessity to ensure that all functions of the facility run smoothly. (Conditions for Coverage [CfC]: 494.180)
Does your facility have a Vascular Access Coordinator /Vascular Access Manager?				Management changes can potentially affect a facility's performance if processes, procedures, and protocols are not implemented during this transitional time period.
If your facility has recently experienced a management change, was the facility's vascular access program and its importance communicated to the new manager?				During management changes some things may be overlooked, not made a priority or not communicated. Ensure that the incoming manager is aware of the facility's responsibility to adhering to the Network's goals and activities for AVF usage and other clinical indicators.
Does your facility's vascular access program have written protocols, policies & procedures or a work process that is implemented by the staff, acting manager, etc.?				Having written processes, protocols, or policies & procedures would be beneficial during the times of management conversion. This would allow any staff member or acting manager, acting VAC, etc to continue implementing your vascular access program. This would ensure that your facility continues maintain and/or improve your vascular access outcomes.
Does your facility have sufficient staffing to allow managers or designated staff (i.e. Vascular Access Managers, QI Coordinators, etc.) to perform their duties?				CfC 494.180 require the governing body to provide resources (time, staff or funding) for QAPI audits, staff education, refurbishing, etc. as needed to support correction of identified problems.
Is there more than one individual who can access vascular access documents such as monthly access reports, event logs, referral/status logs, etc. at the facility?				Vascular access data stored in a computer should be accessible to more than one individual. This prevents inaccessibility to information relevant to the vascular access program because of management change. This is particularly important for Independent facilities who submit vascular access monthly reports to the Network.



Summary of Best Practices

(2009-2010 QI Projects: < 50% AVF and Reduction in Long-Term Catheter Rate)

Change Concept	Facility Best Practice
<p>Change Concept #1: <i>Routine CQI review of vascular access</i></p>	<ul style="list-style-type: none"> • Communication between staff, patients, and doctors (daily when issues arise, during QI meetings, periodically to follow up on patient’s status post access event, etc.) • VAC/manager conduct rounds periodically to visually see what is going on at the floor <ul style="list-style-type: none"> ○ Staff properly providing vascular access care <ul style="list-style-type: none"> ▪ following P&P ▪ monitoring access properly ▪ assessing access correctly ▪ cannulating access properly ○ Patients following access care instructions <ul style="list-style-type: none"> ▪ washing accesses ▪ holding sites properly post treatment ▪ reporting problems with access ○ Assessing access sites and functionality of accesses • Discuss vascular access during monthly QI meetings <ul style="list-style-type: none"> ○ Discuss/review internal vascular access trending results ○ Share NW reports with staff and during QI meetings – compare facility results to NW average & goal and CMS goal ○ Discuss clotting & infection rates ○ Discuss access problems/events and solutions ○ Review incident patients and conversion patient’s vascular access status • Have a protocol or P&P in place for vascular access care incorporating: <ul style="list-style-type: none"> ○ Education ○ Referral for evaluation ○ Assessment for conversion (AVG to AVF) ○ Access placement ○ Assessing for maturity ○ Follow up care ○ Cannulation ○ Monitoring of functionality ○ Catheter removal • Utilize a calendar book for tracking vein mapping, surgical consults, surgeries, follow-ups, etc.
<p>Change Concept #2: <i>Timely referral to nephrologist</i></p>	
<p>Change Concept #3: <i>Early referral to surgeon for “AVF Only” evaluation and timely placement</i></p>	<ul style="list-style-type: none"> • Have nephrologists talk to surgeons and vascular access centers about AVF placement and vascular access care/interventions • Establish a relationship with the surgeon’s office and/or the surgeon • Schedule appointments during the beginning of the month because that’s when the distribution of welfare and Social Security checks occur • Refer pending Medi-Cal patients to county hospitals for vein mapping and placement
<p>Change Concept #4: <i>Surgeon selection based on best outcomes, willingness, and ability to provide access services</i></p>	<ul style="list-style-type: none"> • Referral to surgeons willing to place AVF access if possible, not surgeons who prefer AVG placement • For facilities located in rural areas, recruit surgeons from other areas to come to your area to provide vascular access care (consultation, evaluation and follow ups). Arrange a regular schedule with a surgeon to come out to your facility or a designated location. (Seek referrals from other surgeons.) • Facility gives the patient the option to select the surgeon they want



Tools & Resources

Facility Tools:

- RCA (fishbone) template
- PDSA template for QAPI plan
- *Vascular Access Root Cause Analysis Tool*
- *Summary of Best Practices*
- Project power point presentation
- Fistula First *Your Access to Success* video order form



Tools & Resources

Professional Resources:

- *Secondary A-V Fistulae in Patients with A-V Grafts*
- Video link – *Patient Assessment Video: Secondary AVF Conversion* (includes Sleeves-Up assessment) by Dr. Spergel
- FFBI draft letter to PCP from nephrologist
- FFBI sample letter to surgeon
- *Vascular Access Surgery Change in Physician Reimbursement 2009*
- *Fistula First Payer Packet*



Tools & Resources

Patient Resources:

- FFBI Patient Education Resource List
- *Understanding Your Hemodialysis Access Options* developed by AAKP
- *Navigating the Vascular Seas – Self-Exam of Access Simplified* developed by Network 12
- *FAQ for Patients & Families* developed by FFBI



Overcoming Obstacles

Categories for Network 18 facilities' common obstacles:

- Education
- Process
- Communication



Overcoming Obstacles (continued)

Lack of education:

- Patients
 - They cannot make an informed decision without knowing all the data.
 - Fear usually stems from not knowing.

- Surgeons/Nephrologists
 - Cannot be fully engaged if they do not know all the information.
 - Cannot understand the importance of vascular access for the patient's clinical outcomes and quality of life.
 - Cannot perform necessary surgical techniques if they have not been taught.



Overcoming Obstacles (continued)

Process:

- Vascular Access Program
 - Process for evaluation, placement and follow-up.
 - Process for assessing the vascular access for problems.
 - Monitoring - physical assessment
 - Surveillance – periodic evaluation of the access by using tests for which an abnormal result suggests the presence of dysfunction.
 - Process for vascular access education (patients and staff).
 - Process for monitoring the facility’s vascular access outcomes.



Overcoming Obstacles

Lack of Communication:

- No one will know what expectations everyone has of each other.
 - Patients/families and staff/physicians
 - Facility/nephrologist and surgeons

- Nothing will be done.

- Information will not be exchanged.



Project Summary and Expectations:

- Conduct an RCA with your interdisciplinary team.
- Develop a Quality Assessment and Performance Improvement (QAPI) Plan and submit a copy to the Network.

(Due: November 5, 2010).

- Implement your QAPI plan and revise as necessary during the project.
- Monitor your facility's progress towards achieving the goal.
- Participate in bi-monthly conference calls

Scheduled for the first Wednesdays of every-other-month at 2pm.

- *Ensure that a representative from your facility is present on these calls.*



Project Summary and Expectations:

- Follow project timelines/due dates.
- Submit requested documents.
 - Clinic Manager Acknowledgement Letter
(Due: September 27, 2010)
 - Medical Director Acknowledgement Letter
(Due: September 30, 2010)
 - QAPI Plan – **Signed by the Medical Director**
(Due: November 5, 2010)
 - Other requested documents during the project



Resources

- **Fistula First**

www.fistulafirst.org

- **Network 18**

www.esrdnetwork18.org

All project documents will be posted to the website under QI Work Plan and your project's name.

The toolkit with resources will be mailed to your facilities within the next few days. Please utilize the tools provided to assist you with this project. Also please review the resources and use them as they pertain to your facility. Also



Project Communication:

- To communicate more efficiently with you about this project and to be more eco-friendly, we are creating a listserv of all the facilities in this project.

- In the past, we have had e-mail delivery problems because of the facility’s firewalls, **please ensure you are able to receive e-mails from me about the project.**
 - Consult with your IT Department to assist you.
 - Please check your “junk mail” for they may have been sent there.



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