



## Improving Vascular Access Outcomes

Continuously increasing the number of patients with an Arterio-Venous Fistula (AVF) as a primary access remains a daunting task for many Nephrologists and dialysis providers. The Centers for Medicare & Medicaid Services (CMS) set the prevalent AVF rate national goal at 66% for patients undergoing hemodialysis by July 1, 2009. Although much improvement has been accomplished since the inception of the Fistula First Breakthrough Initiative (FFBI) in 2003, many challenges remain.

Improving a facility's Vascular Access (VA) outcomes require the involvement of all dialysis personnel and must be monitored closely by the Medical Director. A designated Vascular Access Coordinator (VAC) will provide the continuity for a successful vascular access program and initiatives. Staff members, especially those providing direct patient care, are vital to the program's success. Staff play a major role in the assessment, referral, timing, and follow-up of each patient's vascular access.

There are numerous quality improve-

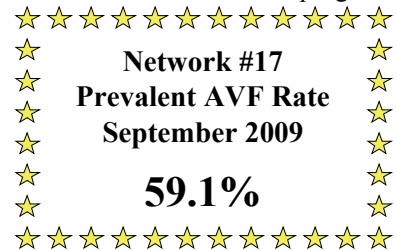
ment tools and resources available for patients and nephrology professionals. Tools can be found on many renal related websites such as the Fistula First Breakthrough Initiative (FFBI), Network #17, and American Association of Kidney Patients (AAKP) to name a few. Facilities can access these tools which will assist in promoting the importance of AVF as a primary access for patients, as well as educating dialysis staff on the benefits patients receive from having AVFs.

In May 2008, Network #17 initiated a Vascular Access Improvement project involving seven facilities with low prevalent AVF rates. Using specific quality improvement tools from the FFBI and other nephrology websites, the Network collaborated with the facilities in writing their facility specific FF "Action Plan". Participating facilities have shown marked improvement in their prevalent AVF rates and all reached the minimum goal of 40%. More importantly, six of the facilities chosen were able to reach the minimum CMS threshold of 45%.

It is imperative that dialysis provid-

ers develop a positive relationship with the Vascular Surgeon's office. Most of the problems encountered in AVF creation, occurs during the first few weeks after an AVF is placed. Frequent assessment by the Nephrologist and timely referrals to the Vascular Surgeon will minimize the risk of patients getting non-maturing or failing AVF's.

It is very important that each facility design a vascular access program based on "Best Practices". Continuous promotion of AVF use should be emphasized to all dialysis patients. Ongoing education of staff members on current trends in care and maintenance of AVFs is also helpful in maintaining a successful Vascular Access program.



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### Fistula First "Eleven Change Concepts"

- |   |  |   |
|---|--|---|
| 1. Routine CQI of Vascular Access.                                    | based on outcomes, willingness and ability to provide access services. | 8. AVF cannulation training.                                      |
| 2. Timely referral to nephrologists.                                  |  | 9. Monitoring and maintenance to ensure adequate access function. |
| 3. Early referral to Vascular Surgeons.                               | 6. Secondary AVF placement in patients with AV Graft.                  | 10. Education for caregivers and patients.                        |
| 4. Full range of surgical approaches to AVF evaluation and placement. | 7. AVF placement in patients with catheters where indicated.           | 11. Outcomes feedback to guide practice.                          |
| 5. Surgeon selection  |  |   |

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## Now Required: Vascular Access Monitoring & Surveillance



As specified in the new ESRD Conditions for Coverage and its corresponding Interpretive Guidance, vascular access monitoring and surveillance are now required in all dialysis facilities certified by the Centers for Medicare & Medicaid Services (CMS). As part of the CROWNWeb data collection, information regarding patients' vascular access will be collected from each facility every month. It is imperative that facilities have a Vascular Access Program and adapt a vascular access monitoring protocol to ensure that problems are identified early and addressed in a timely manner.

Specific guidelines about vascular access monitoring must be in place for each dialysis facility. Staff should be made aware of these guidelines and should always be updated of the facility's data associated with their performance in vascular access monitoring and surveillance. As primary dialysis caregivers, nurses and patient care technicians have the primary responsibility for vascular access monitoring. Therefore, they should be continuously educated on any new standards of care for AV Fistulas (AVF), AV Grafts (AVG), and Central Venous Catheters (CVC). To increase longevity and to promote safety on patients' permanent vascular access, it is imperative that they demonstrate current practices on proper care and maintenance. This will in turn prevent untoward complications such as stenosis, infections, prolonged bleeding, etc., thereby improving overall clinical outcomes.

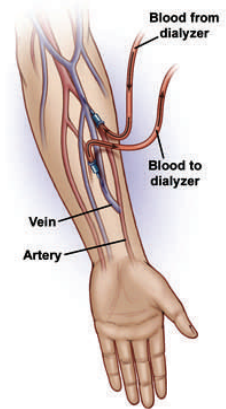
## Promoting Placement and Increasing Use of AV Fistula

Many health care studies have shown that providing specific, targeted education to patients is associated with improved clinical and overall outcomes. The same may be said about patients in later stages of Chronic Kidney Disease (CKD) and those who are already undergoing dialysis. In a recent study by Cavanaugh, et.al., and published by the Clinical Journal of American Society of Nephrology, it was shown that increasing knowledge among patients undergoing hemodialysis and those in later stages of CKD promotes the use of permanent access rather than a Central Venous Catheter.

The Fistula First "Eleven Change Concepts" (see page 1), developed by the Fistula First Breakthrough Initiative (FFBI) was developed for facilities to use in increasing their prevalent AVF rates. Containing information based on best practices, this tool guides facilities in formulating their vascular access program protocols, as well as promoting improved communication among dialysis staff members, nephrologists, and vascular surgeons.

Patients who are in later stages of CKD should be educated and encouraged to plan ahead by consulting with their Nephrologists and asking about referral to Vascular Surgeons for AVF placement. This may be a role primarily assigned to providers and groups caring for CKD patients, but dialysis facilities and its staff members may play a big part by providing educational sessions. Facilities can also provide important information about dialysis and the many ways patients can prepare for life saving options. These educational sessions will provide much needed information about treatment choices and will also help in alleviating patients' fears by giving them the opportunity to ask questions.

Since its first inception in 2003, the Fistula First program made a great impact in the use of Arterio-Venous Fistula (AVF) among patients undergoing hemodialysis. Although pre-ESRD care has improved and the general population's awareness about kidney disease has risen, many patients still present to their first treatment with a Central Venous Catheter (CVC), and it remains to be one of the biggest challenges for dialysis professionals. As many studies have shown, CVC use among patients in dialysis receive inadequate dialysis, lowest level of clinical outcomes, and the worst overall level of satisfaction. Quality improvement programs to increase prevalent AVF rates within each facility should be in place and maintained as a priority. Dialysis facilities, from Medical Director, Clinical Managers, and all primary care staff members, should always keep themselves updated on current trends and best practices in vascular access care. The key is to maintain a proactive approach from each member of the dialysis team to educate patients, family members, and significant others of the advantages of AV Fistula.



**“Get involved, be proactive, promote FISTULA FIRST.”**

## Network # 17 “FISTULA FIRST” CHAMPIONS

### Facilities With The Highest Prevalent AV Fistula Rates (As of June 2009)

1. Red Bluff Dialysis
2. VA Pacific Island Hawaii
3. FMC Lanai Dialysis
4. LBJ Medical Center Samoa
5. Molokai Dialysis
6. South Chico Dialysis
7. Chico Dialysis Center
8. Oakdale Kidney
9. Burlingame Dialysis
10. Turlock Dialysis
11. RAI Village Lane
12. David Grant Medical Center
13. Satellite Central Modesto
14. FMC Antioch
15. Salinas Dialysis Center
16. California Pacific Medical Center
17. Mee Memorial Hospital
18. BMA/FMC Eureka
19. Oroville Dialysis Center
20. RAI Ocean Avenue
21. Satellite South San Francisco
22. Satellite Windsor
23. FMC Brentwood
24. Pleasanton Dialysis Center
25. Soledad Dialysis Center
26. Joy of Dixon
27. DRS/FMC Concord
28. Antioch Dialysis Center
29. Satellite Watsonville
30. BMA/FMC Santa Rosa
31. DRS/FMC Walnut Creek
32. Satellite Santa Cruz
33. Satellite San Mateo
34. Rose Garden Dialysis
35. FMC Kapolei
36. Los Banos Dialysis Center
37. Mills Dialysis Center
38. North Merced Dialysis
39. Satellite Santa Rosa
40. SF General Hospital Renal Center
41. Plumas Street Dialysis

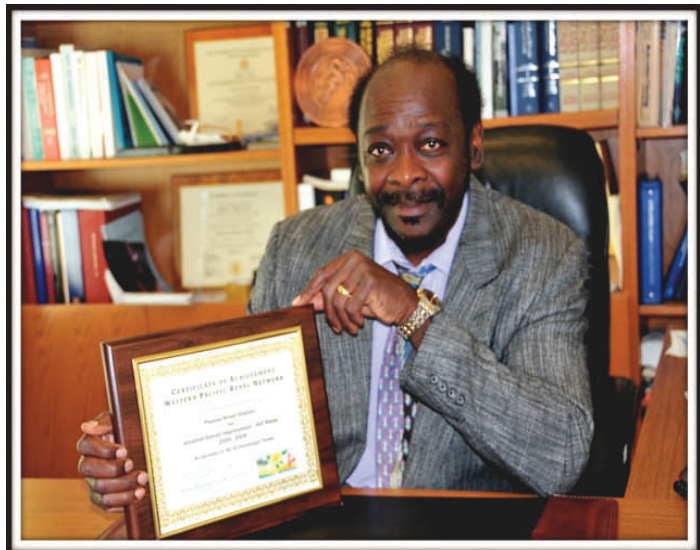


### A Milestone for Plumas Street Dialysis

Congratulations to the management and staff of Plumas Street Dialysis for attaining the CMS goal of 66% prevalent AV Fistula rate in the month of June 2009. Located 43 miles north of Sacramento, this facility also experience challenges faced by many dialysis facilities today. Challenges such as geographic location, limited number of vascular surgeons, patients presenting with Central Venous Catheters (CVC), etc., did not prevent them from persisting and encouraged their patients to have AV Fistula as primary dialysis access. After ending 2005 with a very low AVF rate of 25%, they made changes to their vascular access program and encouraged all of their staff members to participate. They have been very successful ever since.

Ed Houshmand, Facility Director stated, “I am very proud of our nurses and technicians. They are instrumental in making Plumas Street Dialysis reach this milestone. They kept working together and are continuing to do so to achieve what’s best for our patients. The whole team did a great job.”

**CONGRATULATIONS! YOU ARE A  
“BEST PRACTICE”  
FACILITY**



Pictured: Dr. Cosmo Fraser-Medical Director-Plumas Street Dialysis Center in Yuba City, California.

“Dialysis should be done in such a manner to return patients to as normal a life as possible. Patients should feel that dialysis is a blessing and not a curse. They should be able to participate in their usual family activities in between dialysis. They should be able to travel without fear, with usual planning. To achieve this, the Nephrologist and his team must treat each patient individually.”

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### Facilities With AVF Rates of 66% Or Higher (New Facilities & Home Hemo Facilities As Of June 2009)

- |                          |                         |
|--------------------------|-------------------------|
| 1. Tokay at Home         | 6. Wellbound Santa Rosa |
| 2. Wellbound San Mateo   | 7. Wellbound Milpitas   |
| 3. Wellbound San Leandro | 8. Wellbound Sacramento |
| 4. Wellbound Emeryville  | 9. Wellbound Modesto    |
| 5. Wellbound San Jose    | 10. Wellbound Stockton  |

### Facilities With Prevalent AVF Rates of 50% Or Higher (As Of June 2009)

- |                              |                         |                          |                         |
|------------------------------|-------------------------|--------------------------|-------------------------|
| 1. Daly City Dialysis        | 29. Creekside Dialysis  | 57. Grass Valley         | 85. Modesto Kidney      |
| 2. Tracy Dialysis            | 30. Redding Dialysis    | 58. Leeward Dialysis     | 86. Community Fresno    |
| 3. DCI Madison               | 31. Walnut Creek        | 59. Siemens Dialysis-    | 87. Waipahu Dialysis    |
| 4. Kaimuki Dialysis          | 32. Ceres Dialysis      | 60. FMC Central Valley   | 88. Antelope Dialysis   |
| 5. Vacaville Dialysis        | 33. Atwater Dialysis    | 61. Sunset Dialysis      | 89. Lodi Dialysis       |
| 6. Concord Dialysis          | 34. Wellbound Menlo     | 62. RAI Haight           | 90. Yuba City           |
| 7. FMC Los Gatos             | 35. DCI Rancho          | 63. Oakland Dialysis     | 91. Pear Tree           |
| 8. University Dialysis       | 36. Guam Tamuning       | 64. FMC Fremont          | 92. FMC Petaluma        |
| 9. RAI Cesar Chavez          | 37. Napa Dialysis       | 65. Elk Grove Dialysis   | 93. FMC Berkeley        |
| 10. Evergreen Dialysis       | 38. Maui Dialysis       | 66. Satellite Cupertino  | 94. Orangevale          |
| 11. RAI Elk Grove            | 39. Fairfield Dialysis  | 67. Manteca Dialysis     | 95. Berkeley Dialysis   |
| 12. FMC Pittsburg            | 40. Hayward Dialysis    | 68. Renal Centers Guam   | 96. RAI W. March        |
| 13. FMC aloha                | 41. FMC Wahiawa         | 69. Union City Dialysis  | 97. Alhambra Dialysis   |
| 14. FMC No. Sta. Rosa        | 42. FMC Pearridge       | 70. Placerville Dialysis | 98. West Kauai          |
| 15. San Pablo Dialysis       | 43. Satellite Modesto   | 71. FMC Windward         | 99. FMC Ko'olau         |
| 16. CPMC Davies              | 44. RAI Harding         | 72. Vallejo Dialysis     | 100. Satellite Milpitas |
| 17. Satellite Blossom Hill   | 45. RAI E. 14th         | 73. Fresno Dialysis-     | 101. DCI Fort Bragg     |
| 18. Satellite Sonora         | 46. Satellite Gilroy    | 74. UC Mount Zion        | 102. St. Jude Saipan    |
| 19. Satellite Redwood        | 47. Natomas Dialysis    | 75. South Sacramento     | 103. VA San Francisco   |
| 20. Woodland Dialysis        | 48. Marysville          | 76. Clearlake Dialysis   |                         |
| 21. Commonwealth Saipan      | 49. DCI Redding         | 77. Satellite Sunnyvale  |                         |
| 22. SF Dialysis Center       | 50. Satellite Greenbrae | 78. RAI Chadbourne       |                         |
| 23. Napa Valley              | 51. Satellite Turlock   | 79. Dixon dialysis       |                         |
| 24. El Cerrito Dialysis      | 52. FMC Ardenwood       | 80. Alameda County       |                         |
| 25. West Elk Grove           | 53. Kahana Dialysis     | 81. FMC Kapahulu         |                         |
| 26. Colusa Indian Health Ctr | 54. Wellbound Vallejo   | 82. Carquinez            |                         |
| 27. Guam Renal Care          | 55. Florin Dialysis     | 83. Monterey Peninsula   |                         |
| 28. FMC Honolulu             | 56. Manzanita           | 84. RAI Fairway          |                         |

### Facilities With Prevalent AVF Rates of 45% Or Higher (As Of June 2009) (Honorable Mention)

- |                               |                                |
|-------------------------------|--------------------------------|
| 1. North Highlands Dialysis   | 14. Parkway Kidney Center      |
| 2. Benicia Dialysis Center    | 15. Sunrise Dialysis Center    |
| 3. Northgate Dialysis Center  | 16. Kona Dialysis Center       |
| 4. RAI Piedmont               | 17. Kaiser Dialysis Center     |
| 5. Palm Bluff Dialysis        | 18. Tokay Dialysis Center      |
| 6. West Sacramento Dialysis   | 19. Selma Dialysis Center      |
| 7. Auburn Dialysis Center     | 20. Delta Sierra Dialysis      |
| 8. South Hayward Dialysis     | 21. North Hawaii Dialysis      |
| 9. El Camino Dialysis         | 22. Community Dialysis Clovis  |
| 10. RAI North California      | 23. VA Palo Alto               |
| 11. SF Chinatown Dialysis     | 24. Satellite Dialysis Alexian |
| 12. Stockton Kidney Center    | 25. Guam Memorial Hospital     |
| 13. Northgate Dialysis Center |                                |

**“Get involved, be proactive, promote FISTULA FIRST.”**

# “Going for the Gold” Burlingame, California-September 20, 2009 Fistula First “Champion Facility” Awards Ceremony



Top picture: Satellite Dialysis Sonora staff receiving their Fistula First award from Dr. Larry Spergel for the “Highest Sustained Average” - 2006-2008. The award was given for maintaining an average prevalent AVF rates at or above 75% for 3 years.

The following pictures show facility representatives receiving Fistula First Awards, presented by Dr. Larry Spergel, for maintaining average prevalent AVF rates of 66% or above for the year 2008 (continued on next page).



“Get involved, be proactive, promote **FISTULA FIRST.**”

## “Going for the Gold” Fistula First “Champion Facility” Awards



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# FFBI Update

## Roadmap to Reach CMS Goal of 66%

On October 7, 2009, the Fistula First Breakthrough Initiative (FFBI) announced the release of a strategic plan that aims to achieve the CMS goal of 66% AV Fistula utilization in prevalent hemodialysis patients. The Strategic Plan focuses on seven (7) strategies and two (2) policy recommendations. The plan was developed by conducting a root cause analysis that identified the underlying barriers to AV Fistula placement and use. A technical expert panel identified potential solutions to address the root causes.

Led by FFBI, with support from ESRD Networks, the Quality Improvement Organizations (QIOs), and the FFBI Coalition, the following strategies and policy recommendations will be implemented:

### Strategies:

#### **Nephrologist As Leader**

- Encourage and support nephrologists to take leadership role and be accountable for vascular access management in all hemodialysis patients

#### **Leveraging Partnerships**

- Partner with organizations to improve AV Fistula placement and utilization rates

#### **Hospital Systems**

- Modify hospital systems to promote AV Fistula placement

#### **Patient Self-Management**

- Promote patient self-management through the stages of CKD

#### **Addressing Access problems**

- Promote fast-track protocols for rapid identification and referral of vascular access problems, which include failure to mature, revisions of the failing AV Fistula, and failure to place an AV Fistula

#### **Practitioner Training and Credentialing**

- Promote training, experience, and credentialing of healthcare professionals in the area of hemodialysis vascular access management

#### **FFBI Change Concepts**

- Expand and endorse the current Change Concepts for education and promotion throughout the renal, surgical, and interventional communities

### Policy Recommendations:

#### **Pay for Performance**

- A fundamental strength of traditional fee-for-service payment is that it closely matches payment to actual resource use. Payment is established based on the services the patient receives

#### **Assurance of Data Flow**

- Accurate data, reliably collected and validated, available in a timely fashion, and analyzed in meaningful ways, serve to aid the renal community in understanding challenges, setting goals, and tracking progress

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**Advisory:**

Please be advised that per CMS directives, transmission of documents containing protected patient information via **email** and **unsecured fax** is prohibited. If transmission of abovementioned documents is necessary, please fax to:

**(415) 897-2443**

Thank you very much.

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**FISTULA FIRST  
 RESOURCES ONLINE**

FISTULA FIRST INITIATIVE  
[www.fistulafirst.org](http://www.fistulafirst.org)

Western Pacific Renal Network  
[www.esrdnet17.org](http://www.esrdnet17.org)

American Association of  
 Kidney Patients  
[www.aakp.org](http://www.aakp.org)

Society for Vascular Surgery  
[www.vascularweb.org](http://www.vascularweb.org)

**Extra!**

Network #17 is looking for two nephrology professionals interested in becoming members of the Fistula First Subcommittee. Meetings are held in person every two months at the Network #17 office. If interested, please send your resume to the Network #17 office. For more information or for questions, please call **(415) 897-2400**

**QUALITY IMPROVEMENT NOTES**

The Western Pacific Renal Network, LLC Quality Improvement (QI) Department, together with the Fistula First Subcommittee, is continuously developing programs and initiatives to promote the use of Arterio-Venous Fistula (AVF) among eligible ESRD patients. We would like to thank all Network #17 facilities for the efforts they put in to assist us in increasing our prevalent AVF rates. We also would like to take this opportunity to congratulate all facilities who have attained and maintained their prevalent AVF rates above the CMS threshold of 66%. Keep up the good work.

**Network #17 Fistula First Upcoming Activities:**

- Cannulation, Buttonhole Technique, Catheter Out! Workshops
- Nephrologists, Vascular Surgeons, Interventionalists Symposiums
- Fistula First Quarterly and Monthly Report Mailings
- Distribution of Fistula First Materials
- Continuous Participation in the National Fistula First Breakthrough Initiatives (FFBI)

**Network #17 Fistula First Newsletter**

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