



2009 Dr. Richard Breitenfield Quality Award

2009 Dr. Richard Breitenfield Quality Award

In 2004, The Vascular Access Advisory Panel of The Renal Network, Inc. created the Fistula First Quality Award designed to establish and promote quality initiatives in the area of increasing AVF in the hemodialysis patient population.

The goal of this fistula quality award is to demonstrate performance above standards in the area of promoting AV Fistulae and vascular access management related to the Fistula First Initiative.

This is a performance-based award. The applicants present chronologic information with supportive data that demonstrate rapid, sustainable improvement. The applicants validate specific team processes used to realize improvement in the placement and usage of AVF. The outcomes demonstrated must be exportable, meaning that other dialysis facilities and/or medical organizations may benefit from their experiences.

In 2007, this award became The Dr. Richard Breitenfield Quality Award. Dr. Breitenfield was a dedicated nephrologist from Muncie, IN, who was very supportive of Network quality initiatives and was instrumental in putting processes into place that led to outstanding fistula rates in the Ball Memorial Dialysis facilities.

This year there were six applicants for the Dr. Richard Breitenfield Quality Award. All of the award applicants have shown outcomes greater than their Network prevalent patient fistula rate and have put processes into place that help them achieve superb results.

All six of the applicants are being 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. The **Gold Award** is based on prevalent fistula outcomes of $\geq 66\%$. The **Silver Award** is given to those that can describe processes supporting an outcome that realizes 60-65%. And the **Bronze Award** is given for outcomes of 54-59%. There were three Gold, two Silver, and one Bronze award winners.



2009 Dr. Richard Breitenfield Quality Award

Gold Quality Award Winners

Gold Award - Manteno Dialysis Centre from Manteno, Illinois

This facility has achieved and sustained a prevalent patient fistula rate of $\geq 66\%$ for several years.

They decided to look at multiple related quality goals and design their QAPI program using the PDSA cycle to improve access, adequacy, and infection rates. Their interdisciplinary team identified that their fistula rates were influenced radically due to small unit size by incident patients and thrombolytic/infection episodes

The facility took the following approaches to realize success:

- Permanent access planning started from first treatment for incident patients.
- Monthly communication to vascular surgeon on all catheter patients to assure efficient movement through pathway.
- Hardwired existing best practices and created ownership for all team members through annual staff evaluations.
- Continuous QI and communication with all team members.
- Utilizing master cannulators and vascular access manager.
- Utilizing existing resources versus focusing on barriers beyond their control.
- Using proven QAPI process – PDSA.
- Patients were involved through monthly newsletters and encouraged to ask staff if they had performed hand hygiene.
- Staff was inserviced on hand washing technique.
- Cath lab staff was educated on creation, care, and complications prior to a failure episode.

By December 2008 fistula rates had increased to an annual average of 71% with multiple months achieving 74%. Facility adequacy outcomes improved due to increased AVF percentage. Complications such as thrombotic episodes had decreased from 1:18 patient months to 1:36 patient months and the access related infection rate had decreased by 50% with nine consecutive months at zero infections.



2009 Dr. Richard Breitenfield Quality Award

Gold Award - Cincinnati VA Hospital from Cincinnati, Ohio

This facility has established an interdisciplinary team directed toward an outcome of early pre ESRD placement of AVF for hemodialysis. They have developed a pathway that includes the acute hospital inpatient to chronic, the Stage 4 CKD outpatient, and the outside of system referral. They have a team approach including nephrologists dedicated to early referrals, interventional radiology, general and vascular surgeons committed to “AVF only”, dialysis nurses that are experts in AVF cannulation technique, and a dedicated vascular access coordinator.

The facility points to the following processes that have given them success:

- Stage 4 CKD is referred to dialysis vascular access coordinator early for education and scheduling of procedures.
- Fistulas are placed before dialysis has started.
- Regular monitoring and intervention of AVF as needed prior to maturity or initiation of hemodialysis.
- Routine transonic access flow rate monitoring when AVF is being used.
- Use of cannulation techniques such as buttonhole and aggressive needle site rotation.
- Utilizing the vascular access coordinator to coordinate accesses from early referral for placement through life of AVF.
- Dedicated and professional dialysis nurses.
- Interdisciplinary communication, evaluation, and re-evaluation directed at CQI and improved patient outcomes.

The following statistical rates are followed to evaluate all AVFs placed – Fistulas which have successfully matured to use without revision, matured fistulas with no revision, matured fistulas without thrombosis, fistulas failing to mature and requiring revision or new fistula placed, thrombosis occurring prior to first use, and surgical attempt at placement but unsuccessful.

These efforts have resulted in meeting and sustaining FF goals and a zero percent thrombosis rate over the past three years for all AVFs placed by their surgeons and used in their unit. Their December 2008 prevalent patient fistula rate was 66.6%.



2009 Dr. Richard Breitenfield Quality Award

Gold Award - Madisonville DaVita in Madisonville, Kentucky

This facility started the year with a prevalent patient fistula rate of 70.4% and a prevalent patient all catheter rate of 12.5%. Their medical director is very “proactive” in the campaign for early detection and treatment of kidney disease. This also makes him proactive in the early referral for evaluation and vein mapping of patients in Stage 4 CKD.

This facility has many processes in place that help to make them successful:

- Nephrologists have educated primary care physicians in the area and provided them with tools for early CKD detection.
- Nephrologists recommend and document an AVF plan for all patients pending dialysis regardless of modality.
- Providing education for patients and family on the benefits of AVF.
- Every patient has vein mapping completed prior to meeting with vascular surgeon.
- Surgeons collaborate with interventional radiologists for timely interventions.
- Patients are referred for AVF evaluation in Stage 4 CKD whenever possible.
- If a patient is not discovered until the initial hospitalization they are evaluated by the vascular surgeon before discharge.
- Developed a transfer protocol with the surgical technician to expedite interventions.
- Patients have a three week post-op follow up appointment after placement.
- Cannulation workshops and other education are provided for staff.
- The most senior/best staff performs new access cannulations.
- Nephrologists and nursing staff continuously evaluate accesses for early signs of failure.
- Inservices for hospital and nursing home staff are conducted to prevent complications.
- All catheter patients are evaluated for a permanent access if one has not been placed.
- Surgeon utilizes all current surgical techniques and evaluations.



2009 Dr. Richard Breitenfield Quality Award

This facility was also recently involved in a state of emergency due to ice storms. Some patients were evacuated and had to dialyze in a different facility. The facility's CQI team unanimously agreed to incorporate the Access Directional Flow Graph into an individualized packet. The patients take the packets with them when going to other facilities as transient patients to assist in cannulating the access while preserving access integrity.

All of the above processes have given this 81 patient facility a December 2008 prevalent patient fistula rate of 80.7% and a prevalent patient all catheter rate of 5.1%



2009 Dr. Richard Breitenfield Quality Award

Silver Quality Award Winners

Silver Award - Tri-Cities Dialysis/Fox Valley Dialysis from Aurora, Illinois

This award is presented as a joint award recognizing two sister facilities that are utilizing the same tools to improve fistula placement and survival. Under the guidance of the medical director there is a team devoted to the Fistula First concept and the K/DOQI guidelines. The team consists of nurse managers, dialysis staff, a nurse educator, and surgeons. The Fistula First tools and resources from CMS and NW 9/10 are utilized. This facility has begun using an access center that has improved time to maturation on multiple accesses, provides vein mapping for pre-access placement, and assists staff in successful needle placement. Their nephrologists are committed to early referral and placement of fistula and attend conferences to remain educated.

These facilities have implemented the following processes related to their success:

- Monthly meetings are held to discuss and plan patient accesses.
- A new form has been developed to document the status of maturing accesses and has improved on early intervention.
- Staff education was done focusing on cannulation techniques.
- Primary cannulators are used for new fistula.
- “Master Cannulators” are utilized.
- Patient education was done regarding access types and care.
- Patients without fistula are educated on different modalities and best access resulting in 12 patients changing to peritoneal dialysis and 6 patients having fistulas placed.
- Monthly access monitoring and adequacy was incorporated into their quality improvement program.
- Policies were developed for new AVFs with documentation tools.

The team states that their success lies in communication and commitment.

The December 2008 prevalent patient fistula rates for these facilities are 65.8% and 62.3%.



2009 Dr. Richard Breitenfield Quality Award

Silver Award - FMC Solon from Solon, Ohio

This facility has worked very hard over the past year to increase fistulas and decrease catheters. They also concentrated efforts on encouraging surgeons to make AVF the access of choice and referring to surgeons for vein mapping.

They have included technicians in pro and con access communication and patient education developing an environment where everyone sends the same message.

The facility has implemented the following processes related to their success:

- Monthly meetings are held to discuss and plan patient accesses.
- A communication book is utilized between disciplines to record any actions taken on behalf of patient to get access placement.
- Patient are involved in all actions taken toward access placement and maintenance.
- All staff educated and well informed to discuss access options.
- Appointment information sheet is given to the patient indicating place, time, surgeon, etc.
- Monthly transonics are done so access problems can be addressed quickly.

Each discipline took an aggressive approach to ensure each catheter patient was seen by a vascular surgeon within three months from the initial start within the facility. The team states that persistence in follow through is the key to success.

In January 2008, this facility had a 58.6% prevalent patient fistula rate and a 30.3% prevalent patient all catheter rate. In December their fistula rate was 64.2% and their catheter rate was 5.3%



2009 Dr. Richard Breitenfield Quality Award

Bronze Quality Award Winner

Bronze Award - RAI Care Center Muncie from Muncie, Indiana

This facility set a goal for increasing the prevalent patient fistula rate by ten percentage points in six months by rapidly referring to the surgeon for evaluation and vein mapping and utilizing the “fistulas only” ideology.

The identified vascular access team members have specific duties and responsibilities designed to ensure improvements and positive outcomes. This facility has implemented the following processes in order to realize their goal:

- Incident patients with catheter only complete vascular access education and are referred to the surgeon within one week of arrival.
- Surgeon appointment date and time is documented with follow-up to confirm completion.
- Vein mapping and fistula surgery date scheduled within four weeks of arrival.
- Type of access and surgeon follow-up date is documented.
- Weekly evaluations are completed with documentation regarding maturation, surgeon follow-up dates and a timeline for use.
- Cannulation pathway is utilized when fistula has matured and catheter removal is scheduled when pathway completed.
- Rapid referral to radiologist for intervention if access dysfunction occurs to salvage fistula.

They put the new processes into place in July 2008 with a prevalent patient fistula rate of 46.8% and a prevalent patient catheter rate of 43.2%. The facility’s December 2008 prevalent patient fistula rate increased to 57.4% (up 10.6) and the prevalent patient catheter rate decreased to 36.7% (down 6.5).



2009 Dr. Richard Breitenfield Quality Award

Thank you to all the applicants and award winners of this year's Dr. Richard Breitenfield Quality Award. Over this next year we plan on utilizing the innovative processes submitted by the applicants and sharing their information through various initiatives.

We encourage all facilities that are meeting the award criteria to apply for this award next year. The information that you can provide to others is invaluable and it is our intent to recognize the good works and improvements you have achieved.

It is our hope that next year we will be able to recognize many more of our outstanding facilities that have achieved excellence in AV fistula creation, maintenance, and sustainability.