



## *Vasc-Alert Vascular Access Surveillance Best Demonstrated Practices*

*Clinics may vary in process based on their own clinical policies & procedures, location, available services, staff structure, and patient outcomes. Following are five key elements that we consistently find and that many in the renal industry have documented to be key components and practices of a “good” vascular access program. Each dialysis clinic needs to develop, participate, and sustain an active vascular access program in order to measure and achieve quality outcomes, align with current industry standards, Conditions of Coverage, K/DOQI Vascular Access Guidelines and Clinical Performance Recommendations, and to adhere to the CMS Network/CROWN data collection. Vascular Access Programs are an excellent area to focus your QAPI and CQI programs and may be the cornerstone of Pay for Performance in the future.*

*Vasc-Alert strives to be an integral part of the support system to our clients regarding their patient’s vascular access outcomes. Since no two clinics are exactly the same, we compiled a list of 5 areas that we consistently see in our day-to-day clinic contact as making the difference between an access program and a “good” access program as recommended in the 2006 K/DOQI. The feedback was that when our clients implemented these strategies they saw greater cost-savings, greater compliance, minimal staff time requirements, better patient outcomes, and positive multi-specialty team efforts, then they had prior to start-up. Most importantly though, they had positive patient outcomes and created an environment for better quality of life for their patients.*

*On the following pages are examples of these 5 Strategies/Best Demonstrated Practices:*

*Strategy #1: Staffing/Team Approach-One is a Leader, Two or more is a Team*

*Strategy #2: Data Responsibilities-If you don’t look -you can’t act*

*Strategy #3: COI Review Process-Just because you don’t see it doesn’t mean it isn’t happening*

*Strategy #4: Timely Referrals-Proactive vs. Reactive*

*Strategy #5: Measuring Outcomes-If you don’t measure you don’t know*



**Using Vasc-Alert: Client's Best Practices/5 Strategies to Success**

**Strategy #1: Staffing/Team Approach-One is a Leader, Two or more is a Team**

1. Facility assigns staff member(s) to be Vascular Access Coordinator (VAC) or a key contact person for Vasc-Alert team to coordinate program and educational needs through. Individual should be knowledgeable about patients and vascular access. Provide Vasc-Alert with best contact times, location, and best method ie: email, office phone, cell phone.
2. VAC assists Vasc-Alert in obtaining the minimal but very necessary inventory information to start up the clinic on the Vasc-Alert Surveillance Program. This can often be done via phone in less than 10 minutes.
3. VAC oversees efforts of other access team members to achieve best outcomes and assists the Vasc-Alert support team with coordinating team educational opportunities.
4. Medical Director is involved in vascular access program and educated on the basics of the Vasc-Alert Program by clinic staff or Vasc-Alert team.

**Strategy #2: Data Responsibilities-If you don't look -you can't act**

1. Weekly or as predetermined by clinic, VAC sees that the necessary existing data (already collected within the clinic's electronic medical records) is uploaded (in some clinics this step may be automated depending upon EMR program being used) to Vasc-Alert through the secure website. Approximately 10-15 minutes per week to complete this task depending upon EMR system. Longer if manual entry.
2. Weekly or when notified by Vasc-Alert that reports are ready the VAC will login through secure website and download patient reports. Please note that patient reports and other files to be downloaded will be located within the following files:  
a. On Alert Patients file (VAPR or AAPR), b. Access Report file, c. all other patients, those patients not currently On Alert. This expedites referring patients On Alert, since the patient files are already separated from non-on alert patients..
3. VAC should confirm that the patient access type and needle gauge are correctly entered into the EMR. The Access Report can be used to identify problematic access information. This is a valuable, yet easy QA process.
4. Uploading/downloading data may be automated (depending on EMR) or it can be performed by a non-clinical staff member. Requirements of staff time are approx. 10-15 minutes per week per each process.



**Strategy #3: Routine COI Review of Vascular  
Access Process and Patient Care**

*It is more than just pressure readings! When you start-up Vasc-Alert, our clinical team provides you with a predetermined scheduled review of patient reports via conference call with an online meeting program. We generally schedule these online meetings a day or two after your reports are ready for viewing or at your request. This can be set-up with one individual (VAC) or with the whole team. When starting up the program this is a key service that we ask clinics to participate in. The exchange of clinical information and education on the program is developed over time and provided on your own patients. This gives the staff the opportunity to include other clinical or patient factors that may impact results or patient outcomes. There is flexibility in scheduling, and includes providing the support for clinicians to focus on developing individualized care plans for their patients' access needs. Generally we provide calls with start-up clinics once a week for the first month (or as needed). At their requests, many of our current Vasc-Alert clients continue to maintain a monthly or quarterly patient review call after their start-up. Depending on the number of patients reviewed these calls are generally 20-30 minutes in length.*

**COI Review Process-Just because you don't see it doesn't mean it isn't happening**

1. ***All patient reports should be viewed*** as a clinical care QA measurement. A number of QA issues can be readily apparent and addressed when viewing Vasc-Alert reports. Some may be related to individual staff members or the clinic may be using outdated or inappropriate clinical processes. This allows for each patient to be viewed and addressed individually which meets a current requirement of the new Conditions of Coverage, as well as the K/DOQI Guidelines & CPR for use of Trend Analysis. Those patients not On Alert will take minimal time to view due to the graphical trend lines that Vasc-Alert provides.
2. ***Some areas to look at are:***
  - a. ***Trending of the patient's venous pressures, negative arterial pressures or blood flow rate. Trending upward of the VAPR or AAPR can indicate a need for further evaluation, even if patient does not exceed the VAPR threshold of 0.55 on the venous side or 0.6 for grafts/0.65 for fistulas on the arterial side for three consecutive treatments. This is a graphical display and easily viewed.***



**Strategy #3: COI Review cont.**

- b. *Has patient achieved or regularly achieves prescribed blood flow rate (BFR)? This can easily be determined by looking at the trending line for the patient's average BFR per treatment or by looking at the table to the right for the numerical listing average BFR over time.*
- c. *Is listed access type and needle gauge listed on report correct? If incorrect or missing it means that it is incorrect in your EMR since that is where Vasc-Alert collects the data directly from. Note: If access type or needle gauge is incorrectly listed in your system the Vasc-Alert values and calculations can be incomplete, incorrect or misleading. The Weekly Access Report that is a part of your weekly downloads can be viewed for what is in the system and then corrected as needed. This allows clinic to confirm that your documentation regarding access type and needle gauge is current. Corrections to the EMR database can be made on a weekly as needed basis.*
- d. *Arterial monitoring. Is clinic providing and carrying out the appropriate arterial monitoring process as stated in the K/DOQI Guidelines? Are lines being excessively clamped? Alarms being turned off? Are BFRs routinely turned down to silence alarms?*
- e. *Is proper cannulation an issue (individual staff member)? This can be seen if we see single and/or random high venous pressures or low negative arterial pressures (spikes way above threshold) not associated with other trending or clinical data to support access dysfunction. Since each trend-line in the Vasc-Alert report is specific to a single treatment it is easy to determine which staff member cannulated these patients and then review cannulation techniques with them on a one-to-one educational CQI basis. Of course there are some patients that are known to be "difficult sticks" or "movers" while undergoing treatment, which can also cause these random spikes in readings to occur.*

**Strategy #4: Timely Referrals-Proactive vs. Reactive**

1. *Many traditional monitoring indicators for vascular access dysfunction are late indicators, or are not documented in such a way as to assist the caregiver in easily identifying trends. It is important that clinicians learn to identify and understand the early warning signs that Vasc-Alert can provide them regarding patient access dysfunction. Vasc-Alert is often the earliest warning and in some cases the only warning signs prior to an occlusion occurring.*



**Strategy #4: Timely Referrals cont.**

2. *We find that clinics that maintain a schedule for routinely uploading data, followed by consistent review of the patient detail reports (once a week or twice a month) have the greatest success with proactive referrals and increased access patency.*
3. *Develop a routine with your vascular surgeons, interventional radiologists, interventional nephrologists, and access centers, based on your receiving/reviewing your Vasc-Alert reports. This develops a Win/Win situation for them, your staff, but most of all your patients and their families. There may be a bit of a learning curve on the front side but once you are proactively scheduling instead of re-actively scheduling your patients there develops a team effort and the lines of communications open-up. Patients are sent for intervention with a copy of their last Vasc-Alert Report. Share contact information on your referring interventional/surgeon with Vasc-Alert, we can help in the education.*
4. *An important timely issue is learning to recognize the failing access. This is a prime area where proactive discussion and recognition makes a big impact. Vasc-Alert may identify this via trend analysis and other reporting factors. This also works into your Fistula First goals for those patients with a failing AVG that could benefit from a fistula being placed and allowed to develop. Vasc-Alert provides you with data from each treatment, the data is cumulative and each report includes the last 30 days of treatment. Trending analysis makes it very easy to watch, see trends, and prepare accordingly. Proactively Planning.*

**Strategy #5: Measuring Outcomes-If you don't measure you don't know**

1. *There are a number of measurable outcomes when using Vasc-Alert. Here are just a few that our clients have reported experiencing and measuring:*
  - a. *Decreased thrombosis rate*
  - b. *Decreased hospitalization (based on vascular access)*
  - c. *Decreased cost (minimal staff time, no equipment, no inventory, no disposables)*
  - d. *Increased adequacy*
  - e. *Increased patency*
  - f. *Achieve prescribed BFR (individual/ all patients, ID staff short-cuts)*
  - g. *Intervention outcome. Trending should go downward after intervention, as well as remain level. Trending allows for measurement of individual surgical providers outcomes as well.*
  - h. *Trend analysis and other data*
  - i. *Staff education: Cannulation, arterial monitoring, correct procedures, etc.*