

## Factors Affecting Fluid

**Susan Knapp, RD, CS, LD Davita-Broken Arrow, Oklahoma**

One of the biggest challenges that dialysis patients face daily is fluid management. This is particularly true as their residual renal function decreases. Problems that may result from excessive fluid include peripheral edema, ascites, pleural effusion, hypertension, hypotensive episodes during dialysis, left ventricular failure, and dilution of the serum causing falsely low lab values (such as albumin). Many factors including environment, personal routines, sodium intake, diabetic control, medications, smoking, chewing tobacco and poor dental hygiene can contribute to this fluid control challenge.

Environmental influences include our society's tendency to "super-size" everything, even the drink sizes. Beverages are usually part of any social situation or special occasion. We have been told all of our lives to drink plenty of water. Drinking, even to excess, may be a habit that has been developed over many years. We all know that changing behaviors is very difficult and takes time.

For most patients, sodium intake is the main influence on fluid intake. The biggest source of sodium is salt—added by the patient, the cook, or the manufacturer. Salt contains approximately 2400 mg. per teaspoon. The typical diet in America may contain up to 8 grams (8000 mg.) of sodium. Sodium and fluid recommendations for hemodialysis patients need to be individualized, based upon fluid gains between dialysis treatments, blood pressure control, and any residual renal function—the typical allowance is 2000 to 4000 mg. per day. Peritoneal dialysis patients may be able to be more liberal with sodium, but this too must be individualized. Recommendations for PD patients are also generally 2000 to 4000 mg. per day. Excess sodium intake for PD patients can increase thirst, leading to extra fluid weight gain, necessitating the use of more concentrated dextrose in the dialysate solutions. The frequent use of hypertonic (higher dextrose) solutions can make diabetes more difficult to control, cause dry weight gains, lead to hypertriglyceridemia, and potentially alter the ultrafiltration capability within the peritoneal membrane. Each 1-kilogram of fluid weight gain equals 1 liter of fluid and approximately 135 to 145 mEq of sodium (3105 to 3335 mg.).

Even if patients don't add any salt to their foods, their sodium intake can be quite high, depending on food choices. Patients often do not recognize how much sodium they are actually consuming. The dietitian can work with the patients to help them identify some possible hidden high sodium sources in their diet. Eating out frequently can be a source of excess sodium. Patients need to be provided with guidelines to help them be able to make the best choices. Items to avoid or limit include condiments, gravies, and sauces. Many foods contain "hidden" sodium, whether eaten out or at home. Sodium may be added by the manufacturer in the form of salt, monosodium glutamate (MSG),

or various sodium compounds used for flavor enhancement or as preservatives. Foods that are high in sodium without anything additional added by the consumer include preserved meats (hotdogs, ham), pickles, soups, olives, "helper" meals, frozen or packaged dinners (like macaroni & cheese). A solution containing sodium and phosphorus is frequently added to "fresh" meats to extend the shelf life of the product. This is referred to as enhancing. They are usually labeled as "Extra Juicy" or something similar. Although the label must indicate the additional sodium added, the print is usually very small. Fluid weight gain between dialysis treatment is usually directly related to sodium intake.

In addition to the diet, dialysate can be a source of sodium. Sodium modeling or ramping is often used to prevent blood pressure from dropping suddenly during hemodialysis treatments. However, the sodium given to a patient during dialysis may increase their thirst following the treatment. Along with modifying the dialysate sodium concentration, K/DOQI™ suggests other means to minimize hypotensive symptoms, such as reducing the dialysate temperature, ultrafiltration changes, supplemental oxygen, and midodrine orally prior to dialysis.

Another factor that can increase thirst in the patient with diabetes is poor blood sugar control. Reasonable goals for individuals with diabetes on dialysis are a HbA1c less than 7% (equaling an average blood sugar of approximately 150), fasting glucose levels

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less than 140 mg/dL, postprandial glucose less than 200 mg/dL, while avoiding hypoglycemic episodes. Alterations in the meal pattern and/or medications may be needed to achieve these goals. Additionally exercise can provide many benefits, including improved blood sugar control.

Some medications may contribute to dry mouth or increased thirst. Examples of these include diuretics (such as chlorthalidone, metolazone, bumetanide, potassium-sparing agents), blood pressure medications (such as clonidine hydrochloride, guanabenz acetate, guanfacine hydrochloride, prazosin hydrochloride, calcium channel blockers), dopaminergic blocking agents (such as metaclopramide), and histamine H2-receptor antagonists (famotidine, nizatidine).

Other circumstances that can increase thirst include smoking, chewing tobacco, and poor oral health. These are alterable situations if the patient is motivated and has the ability to make the necessary changes.

With the patient's permission, the dialysis team can offer some suggestions for strategies that may help the patient decrease their fluid intake.

#### Ideas to decrease thirst:

- Suck on ice cubes or Sugar-free Popsicle
- Suck on sugar-free hard candy, especially sour candy like lemon drops
- Chew sugar-free gum, especially tart flavored, such as lemonade
- Rinse mouth with chilled water or alcohol-free mouthwash
- Spray mouth with water or flavored water using small spray bottles
- Use special products designed for dry mouth (gel, gum, mouthwash)
- Decrease sodium intake
- Blood sugar control
- Avoid smoking and chewing tobacco

#### Ideas to decrease fluid intake:

- Use small cups for drinking (instead of partially filled larger cups).
- Measure out the fluid allowance for the day and pour out an equivalent amount as it is consumed.
- Plan ahead to save enough fluid for swallowing pills.
- Use applesauce for swallowing pills.
- Postpone fluid intake. Thirst is usually greatest immediately following dialysis treatment. Delaying taking a drink by instituting one of the hints above until the fluid re-distributes within the body can help decrease overall intake.

#### References:

*Bynam-Gray, Laura and Karen Wiesen, Editors, A Clinical Guide To Nutrition Care in Kidney Disease, American Dietetic Association, 2004.*  
*K/DOQI Clinical Practice Guidelines for Hemodialysis Adequacy, National Kidney Foundation, 2000 Updates.*  
*McCann, Linda, Editor, Pocket Guide to Nutrition Assessment of the Patient With Chronic Kidney Disease, 3<sup>rd</sup> Edition, National Kidney Foundation, 2002.*



## Iron Deficiency in Hemodialysis Patients

Leesa Conley, RN, BSN, Network 13

Anemia is often present in patients with Chronic Kidney Disease (CKD). Anemia in these patients is associated with increased mortality and morbidity as well as a decrease in quality of life, left ventricular hypertrophy and impaired cognitive function. Iron deficiency is the major cause of inadequate response to erythropoietin in hemodialysis patients. CKD patients should have sufficient iron to achieve and maintain hemoglobin of 11 to 12 g/dL or hematocrit of 33% to 36%. Several statistical analyses have shown that dialysis patients have significantly more complications, hospitalizations, and a higher mortality rate when their hemoglobin/hematocrit is below 10g/dL or 30%.

The etiology of iron deficiency in hemodialysis patients is varied and can include increased iron utilization (e.g., from erythropoietin therapy), blood loss (e.g., from access-related problems, retention of blood in dialyzer, hematologic testing, and menses), decreased dietary intake or absorption, surgery, iron sequestration due to inflammatory process, and malignancy.

How does erythropoietin treatment lead to the development of functional iron deficiency?

- It causes dramatic increase in red blood cell production.
- Iron uptake by erythroid cells is increased to meet the demand of increased red blood cell production.
- Reticuloendothelial cells are unable to release stores of iron fast enough to meet demand.
- Despite adequate levels of stored iron (ferritin), insufficient iron is available for erythropoietin-stimulated red blood cell production.
- In time, functional iron deficiency limits the response to erythropoietin therapy, and higher doses of erythropoietin are required to reach target hemoglobin/hematocrit levels.

Optimal control of anemia often requires good iron management practices. Because the body can store only about 800 to 1200 mg of iron, iron deficiency can develop easily in hemodialysis patients as a result of ongoing dialyzer-related blood (iron) losses. Hemodialysis patients commonly lose up to 15 to 25 ml of whole blood at each dialysis session, which can add up to losses of 6 to 8 g of iron each year.

According to The National Kidney Foundation's K/DOQI™ *Clinical Practice Guidelines for Anemia of Chronic Kidney Disease*, the most useful tests for clinically assessing a patient's iron status are ferritin, serum iron, and total iron binding capacity (TIBC), in which the transferrin saturation (TSAT) may be calculated from the latter two. Transferrin saturation reflects the total circulating iron available for immediate use and is calculated by dividing the serum iron by the TIBC and multiplying that by 100. Ferritin, an acute phase reactant that may be elevated during infection or inflammation, is representative of total body stores of iron. A low level of either ferritin or TSAT may indicate that iron stores are insufficient to support erythropoiesis. It is recommended that patients receiving erythropoiesis therapy maintain a TSAT of at least 20% and a ferritin level of 100-799 ng/mL.



According to the K/DOQI™ guidelines, the following can be used as a basis for an iron therapy protocol:

- Intravenous (IV) iron can be given on a variety of dosage schedules. If the TSAT is <20% and/or the serum ferritin is <100 ng/mL, the Anemia Work Group recommends that, in adults, 100 to 125 mg of iron be administered IV at every hemodialysis for 10 to 8 doses, respectively. **(Opinion)**
- If the TSAT remains <20% and/or the serum ferritin <100 ng/mL, another course of IV iron (100 to 125 mg per week for 10 to 8 weeks) is recommended. Once the patient's TSAT is ≥20% and the serum ferritin is ≥100 ng/mL, the Anemia Work Group recommends that 25 to 125 mg of iron be given IV once per week. **(Opinion)**
- Schedules for IV iron administration ranging from 3 times per week to once every 2 weeks are also reasonable in order to provide 250 to 1000 mg of iron within 12 weeks. **(Opinion)**
- In patients in whom TSAT is ≥50% and/or serum ferritin is ≥800 ng/mL, IV iron should be withheld for up to 3 months, at which time the iron parameters should be re-measured before IV iron is resumed. **(Opinion)** When the TSAT and serum ferritin have fallen to ≤50% and ≤800 ng/mL, IV iron can be resumed at a dose reduced by one-third to one-half. **(Opinion)**
- It is anticipated that once optimal hemoglobin/hematocrit and iron stores are achieved, the required maintenance dose of IV iron may vary from 25 to 100 mg/week for hemodialysis patients. The goal is to provide a weekly dose of IV iron in hemodialysis patients that will allow the patient to maintain the target hemoglobin/hematocrit at a safe and stable iron level. The maintenance iron status should be monitored by measuring the TSAT and serum ferritin every 3 months. **(Opinion)**

The goal of iron therapy should be to offer **ALL** patients the benefit of improved quality of life by optimal anemia management and to improve erythropoiesis. Having, following and auditing performance of a specific iron protocol is extremely important for optimal patient outcomes.



### **Clinical Performance Measures: Performance Outcomes** By: Leesa Conley, RN, BSN, Network 13 QI Nurse

The Clinical Performance Measures (CPM) activity was developed and established to measure and report the quality of renal dialysis services covered by Medicare (CMS). Network 13 recently reviewed the preliminary results of the 2004 Clinical Performance Measures and Quality Improvement Plans (QIP's) submitted by facilities. The ESRD providers within Network 13 continue to achieve the national performance targets in the areas of adequacy of hemodialysis, anemia management and nutrition. **HOWEVER**, we are not making measurable improvements necessary to keep Network 13 up with the rest of the nation. Network 13 remains at the bottom in the area of anemia management and has shown no measurable improvement in the area of adequacy of hemodialysis. Since July 2004 the Network Quality Improvement staff have been working with facilities to improve their patient outcomes in the areas

of Adequacy of Hemodialysis and Anemia Management. We appreciate the response received from the majority of facilities; however, there appears to be a lack of understanding when it comes to basic quality improvement (i.e., writing a QIP).

Helpful steps in writing a QIP:

1. Know your facility specific data, (i.e., what % of your patients are achieving targets)
2. Identify and list the barrier(s) for adequacy and/or anemia that compromise the quality of care delivered to the patient
3. Prioritize by quantifying barriers (i.e., if ½ of your patients have cath vs ¼ of your patients with non-adherence issues)
4. Address one problem at a time
5. Plan on taking action steps for the barrier(s) identified by priority
6. Re-check and document results
7. Create a trending document for routine monitoring and once targets are achieved...
8. Re-check on a routine basis.

Common barriers to achievement of adequacy and anemia were identified by the QIP's submitted. Anemia management protocols, (erythropoetin and iron), are widely used by the facilities. But after talking with those facilities, few are auditing charts to verify protocols are being followed. Chart auditing can be done quickly and by non-professional personnel. Auditing should be done on a quarterly basis, at a minimum. Several facilities listed new patients as a barrier to anemia management, but unless your facility has 20 or fewer patients, new patients should not affect your facility's numbers to the extent of decreasing your statistical outcomes.

In the area of adequacy of hemodialysis, two barriers identified by facilities were catheters and non-adherence. Again, unless your facility has 20 or fewer patients, catheters and non-adherence should not affect your facility's numbers to the extent of decreasing your statistical outcomes. Most facilities were looking at patients on an individual basis, such as protocols being utilized to improve patient outcomes, (i.e., increasing BFR, treatment times, DFR, etc). The question remains... are chart audits being completed to verify delivery is performed as ordered? If not, how do you know protocols are being followed?

Network 13 is asking dialysis facilities to revisit their QIP's. Has there been improvement in your outcomes? If not, have you identified another barrier? Do you have a new QIP in affect?

The Network has several tools for facilities to utilize in helping to achieve patient outcomes. Please call one of our QI nurses for information or help with your QIP.



### **Patient Centered Care (Quality Improvement)**

Linda Duval RN, BSN, QI Director, Network 13

Putting patients first is key to improving the quality of care. Administrators and nurses can design and offer services that both meet medical standards and treat patients as they want to be treated – with understanding, fairness, competence, and respect.

Providing good quality care means “doing the right things right”. Good quality may mean either MEETING minimal standards for






adequate care or **ACHIEVING** high standards of excellence. Quality can refer to technical quality of care, to non-technical aspects of service delivery such as patients waiting time and staff's attitude. Good quality happens when every staff member at every level believes that quality is important and takes responsibility for it.

Adopting a patient-centered approach often requires a shift in attitudes. Even while trying to deliver good-quality care, most service providers and other staff members have assumed that they, as health care experts, know what is best for the patients. An orientation to the patient recognizes that patients' concerns and preferences also are valid and important. Patients value individualized service and prefer providers who make the effort to understand their particular situation and needs. They want providers to listen to them, to explain options in terms that they understand, and to assure them that problems can and will be resolved.

There are many ways to improve quality, such as enforcing or revising standards, strengthening supervision, and asking managers or technical experts to redesign a process. The concept of Quality Improvement (QI) involves a team-based, problem-solving approach. Identify a problem(s) or an opportunity for improvement. Draw on existing sources of information, including service statistics, staff and supervisor concerns, patient feedback, and own data. Again, you must know your data.

QI team must analyze the process that needs improvement, consider all possible reasons for the problem, and collect data to determine its root causes. Remain open-minded and do not make assumptions about the reasons for a problem. The QI team evaluates the effectiveness of its solutions and decides whether they should be retained, refined or abandoned. When an innovation is successful, it should become the standard operating procedure. Making quality a top priority can require changes in goals, guidelines, attitudes, and activities that are difficult to make. You do not change overnight but rather one step at a time. Commitment and persistence are crucial. Over the long term, the keys to good quality will be attention to patients' needs and preferences and a commitment to services that protect and provide for patients and maximize access to services.

Used to improve all the processes of the dialysis, a quality improvement plan (QIP) encompasses the entire organization, from the governing body to support services, includes direct care providers and consumers; and, must be committed to a cooperative effort to improve care. The opportunities to improve care will mostly be found by examining the systems and processes by which care is provided. Dialysis care will be improved by looking at the series of activities that comprise any key function in the dialysis facility. QI is a method of continuously examining processes and making them more effective. Quality Improvement is concerned with making the process better. 

**Angry Patients** – What happens when you are 'face-to-face?'  
By: Linda Duval RN, BSN, QI Director, Network 13

In the stressful atmosphere of a dialysis facility, anything from waiting too long to get on the machine or news of a poor prognosis can trigger an outburst. Regardless of the reason for a patient's

furor, it's vital for everyone to be alert to such anger and know how to defuse it.

**OBSERVE BODY LANGUAGE** - Anytime you are approaching a patient, approach with care. Walk slowly and stay more than an arm's length away until the patient's mood can be evaluated.

**LOOK FOR SIGNS** - Before patients act out violently, they generally show signs of agitation. Incessant complaining, forcefully flipping through the pages of a magazine, book, newspaper and rapid movements all suggest an impending outburst. A history of violence, whether physical or in the form of verbal threats, should also raise a red flag.

Communication within the entire patient care dialysis team should be accomplished so that proper precautions can be taken. Document aggressive behavior objectively. Write, "Patient slammed hand against door," rather than "patient appeared furious."

**COMMUNICATE OPENLY** – If you see signs of agitation, don't ignore them. Make an attempt to listen without judgment. If any expectations or needs have gone unmet, express empathy, validate the patient's emotions and offer to help find a solution. Do not attempt to convince the patient that the perception is incorrect, or to explain or make excuses for the perceived lapse.

**REMAIN CALM** - Avoid being confrontational or defensive, and use non-threatening body language. Face the patient at an angle rather than head on, and refrain from pointing a finger or folding your arms. To protect yourself, don't turn your back on a patient who's very upset. Stay at least two feet away during violent behavior.

**GET HELP** - It's not always possible to effectively manage a belligerent patient on your own. If the agitation or frustration seems to be escalating to a frightening level, don't delay. Page security, summon nearby coworkers or activate your facility's emergency procedure.

To improve your ability to effectively handle angry patients, get additional training. Seek out in-service programs or techniques for resolving conflict or restraining patients to avoid injury, and familiarize yourself with your facility's policy on police involvement.



## From The Data Desk

by Cindy Smith, Data Manager, Network 13

It's that time of year again, time for Annual Facility Surveys (CMS – 2744)! In addition to the information we have always collected, there are some new fields on this year's form. Below, you will find those fields listed, along with a brief description of the information required to complete that field. Please read this information carefully so that you will be prepared to complete these fields when you receive the CMS-2744. We anticipate sending these forms to your facility the last week of January 2005 as soon as we complete processing of December 2004 NPARs. If you have any questions, please call me (405.942.6000 ext. 3013)



**Note:** In regards to frequent dialysis, report only those patients on hemodialysis as of December 31 and dialyzing **MORE than 4 times per week**. Nocturnal dialysis is defined as hemodialysis that takes place while the patient is sleeping for approximately 8 hours.

Hemodialysis Patients Dialyzing More Than 4 Times Per Week					
Setting	Day			Nocturnal	
Incenter					
Home					
	<b>30A</b>			<b>31A</b>	

**NOTE:** Enter the following information on each of the patients reported based on their activities **at any time during the calendar year (January 1 through December 31)**. Information being provided is for patients, who as of December 31, are living and have attained the ages of 18 through 54. You can count patients as both attending school and employed either full-time or part-time.

Vocational Rehabilitation											
Patients aged 18 through 54			Patients receiving services from Voc Rehab			Patients Employed full-time or part-time			Patients attending school full-time or part-time		
<b>32</b>			<b>33</b>			<b>34</b>			<b>35</b>		

**Field 32: Patients Aged 18 through 54.** Enter the number of dialysis patients who, as of December 31, were ages 18 through 54, and who were dialyzing at your facility. (**NOTE: This field will be pre-populated by the Network from information reported by you on monthly NPARs.**)

**Staffing**

Enter the number of Full-Time and Part-Time staff positions at your facility **as of December 31**. Also provide the number of Full-Time and Part-Time staff positions that are open and not filled **as of December 31**.

The following definitions are provided as guidelines in completing this section:

Position	Number of Staff		Number of Open Pos.	
	Full Time	Part Time	Full Time	Part Time
a. RNs				
b. LPN/LVNs				
c. PCTs				
d. APNs				
e. Dietitians				
f. Social Workers				
	<b>38</b>		<b>39</b>	
	<b>40</b>		<b>41</b>	

**Full-Time Position** is defined as a position with at least 32 hours employment per week

**Part-Time Position** is defined as a position with less than 32 hours employment per week and includes per diem staff.

**APN:**The Advanced Practice Nurse (APN) is a Certified Registered Nurse (RN) with advanced certification as a nurse practitioner (NP) or a Clinical Nurse Specialist (CNS) who has

met advanced educational and clinical practice requirements. Do **NOT** report Certified Nephrology Nurses (CNNs) in this category. Do not double count a registered nurse in this category. **We are also busy this year training non-LDO (Large Dialysis Organizations) facilities for use of the VISION software. For purposes of VISION, LDO's are defined as Davita, DCI, FMCNA, Gambro and RCG. We have training scheduled for January 12 and February 2. If you are able to participate, please contact Cindy Smith at extension 3013 or Nellie Hedrick at extension 3015. WE NEED YOU!!!! We will be scheduling more in upcoming months.**

**HD Adequacy Improves Our ESRD Patients' Quality Of Life** By: Leesa Conley, RN,BSN, Network 13

In order for our patients to live longer and feel well, they must be dialyzed significantly to decrease the toxins in their body. Patients have a tendency to base their adequacy knowledge on "how they feel", not necessarily what their adequacy number is. Quality of life plays a major role in patient adherence to the hemodialysis therapy prescribed and patient's perception of therapy (i.e., how they report symptoms, how much do they understand the importance of adherence to regimens such as diet, fluids, dialysis schedule, duration [time on machine] and medications, etc.).

Six major barriers have been identified to delivery of prescription:

- ✓ Weight
- ✓ Treatment duration (time on dialysis)
- ✓ Kt/V (technical and practical)
- ✓ Blood flow rate (BFR's)
- ✓ Dialysate flow rate (DFR's)
- ✓ Dialyzer

Caregivers need to pay attention to the initial pre-dialysis assessment with regards to volume and electrolyte issues. It is important that we do more than "just look at" the ordered dry weight or weight gained between treatments. Dry weight is a dynamic issue depending on the patients' overall status. The very principles of hemodialysis mandate electrolytes and toxins to come in contact with the dialyzer membrane. When a patient has excessive weight gains ( $\geq 5\text{kg}$ ), the blood and plasma are so diluted that the frequency of contact (blood and plasma) with the membrane may be significantly decreased. The first hour of dialysis may not be providing much actual dialysis. Once the volume has been decreased, contact becomes more frequent and exchange of chemicals and toxins begins allowing actual cleansing of the blood.

Duration of dialysis treatments is one of the major components to adequacy. Even with optimal time on hemodialysis, only a small amount of blood cleansing is occurring in contrast to normal kidney function. Time is an issue for everyone involved in the ESRD treatment setting, whether it is a physician, nurse, technician, patient or family. There is a current tendency to explain shortened dialysis treatment times by patient non-adherence to prescribed time on machine. But frankly, duration appears to be a shared problem between caregivers and patients. The needs of the facility and/or staff can cause shortened treatments just as often as patients' needs or demands can cause shortened treatments.



Anything that affects the data provided for the calculation will affect the Kt/V and URR. The patient's adherence to the dialysis regime, delivered blood flow rate, duration, dialyzer size or type, weight (pre, post and estimated dry weight), hematocrit and method of the blood draw. Patients do not necessarily view or measure the adequacy of their dialysis in the same way that caregivers do. Their main indicator is how they feel. When discussing adequacy results with patients, it should be discussed from the viewpoint of how their results affect how they feel.

Blood flow rates directly impact adequacy of dialysis, as it is the determinant of volume delivered to the dialyzer. The lower the blood flow rate, the less total amount of blood dialyzed in a single treatment. The higher the blood flow rate, the greater the total blood volume. Careful assessment of the access with each dialysis treatment is an important component of hemodialysis. Not every access is the same, just as every person is different. Relying on memory or habits is not always the best answer. Proper assessment, needle placement and line hook-up will improve correct blood flow. Also, machine maintenance is extremely important as the machine may indicate the correct blood flow rate but, if not calibrated correctly, it may be delivering more or less.

The dialysate flow rate determines the volume of dialysate that will be bathing the dialyzer per minute. There have been studies indicating that the dialysate flow rate should be two times the blood flow rate to maximize adequacy thus allowing constantly fresh dialysate to bathe the blood and remove increased amounts of toxins. However, there are those who support the practice of a lower dialysate flow rate which allows a long exposure time with the blood increasing diffusion and osmosis. Several studies have shown as much as a 10% increase in urea clearance when the dialysate flow rate was increased from 500ml/min to 800ml/min.

The choice of membranes is a facility-specific decision. It is important for the caregiver to know and understand the type of the dialyzer, membrane and size of the dialyzer their patient(s) is using. It is beneficial to the caregiver to understand why the size and type of the dialyzer for each patient is selected.

(From: Adequacy of Hemodialysis: Prescription & Delivery Quality Improvement Activity Network 13)



### **“Sit Down” Rounds Improve Patient Outcomes**

“Sit down” medical rounds, during which a health care team meets to review a patient's medical record and discuss short-and long-term needs, are associated with better outcomes for kidney dialysis patients, according to a Johns Hopkins-directed study. Patients treated at clinics that conducted sit-down rounds at least once a month were more likely to have healthy levels of albumin and hemoglobin than those seen at clinics that performed only walking rounds, in which the nephrologist typically assessed more immediate needs of patients as they are being dialyzed. The patients were 32% less likely to be admitted to the hospital, and 29% less likely to die.

Sit-down rounds provide the opportunity for the patient care team to thoroughly assess progress, address problems and tailor strategies, according to Dr. Neil Powe, Director of Hopkins'

Clinical research. “Our results provide evidence that time spent meeting to discuss each patient's progress is as important as direct care in chronic disease management, in that this rounding practice is associated with better outcomes. Sit-down rounds may be warranted for patients with multiple chronic illnesses—a growing concern among the aging baby boomer population”.

“Sit-down” rounds do require dedicated time when team members can meet Powe acknowledges. “In busy dialysis units that are short-staffed or under financial constraints, this may be difficult. Such rounds must then be scheduled outside regular shift, or when there is low volume of patients”.



### **Networking Opportunity: Vascular Access**

**Course** By: Linda Duval RN, BSN, QI Director, Network 13

## ***Did you know ?***

***LifeSites are classified as a catheter according to the “Fistula First” Project? When filling out your vascular access data collection tools, please be sure and list them accordingly.***

This past September, surgeons who practice in the ESRD Network 13 service area (Arkansas, Louisiana, Oklahoma) were invited to a very specialized surgical/radiological course in conjunction with the ongoing National Vascular Access Improvement Initiative (NVAII) “FISTULA FIRST”. The faculty for this event were leaders in the field of vascular access for hemodialysis patients, (W. Perry Arnold, MD, William Jennings, MD, and Lawrence Spergel, MD). Dr. Spergel is on the NVAII Leadership Workgroup and Dr. Jennings is a member of the Network 13 Quality Improvement Committee and has published and presented on the “Proximal Radial Artery” placement technique for AVF's.

In an effort to continue the improvement seen to date in arteriovenous fistula (AVF) placement rates, some of the surgeons who attended this course are available to discuss tips, techniques, and considerations specific to AVF placement. Contact information for these surgeons can be provided by contacting Linda Duval at the Network office, 405.942.6000, Extension 3016.

- |                      |                        |
|----------------------|------------------------|
| 1. Abernethy, Edward | Enid, Oklahoma         |
| 2. Adams, Craig      | Tulsa, Oklahoma        |
| 3. Akkad, Nabil      | Ft. Smith, Arkansas    |
| 4. Hrdlicka, Kyle    | Claremore, Oklahoma    |
| 5. Olinde, Andrew    | Baton Rouge, Louisiana |

The Network thanks these gentlemen for their participation in the surgical course and their efforts towards improving the quality of life for the hemodialysis patients in ESRD Network 13.

### ***Mandated Performance Goals for AVF's:***

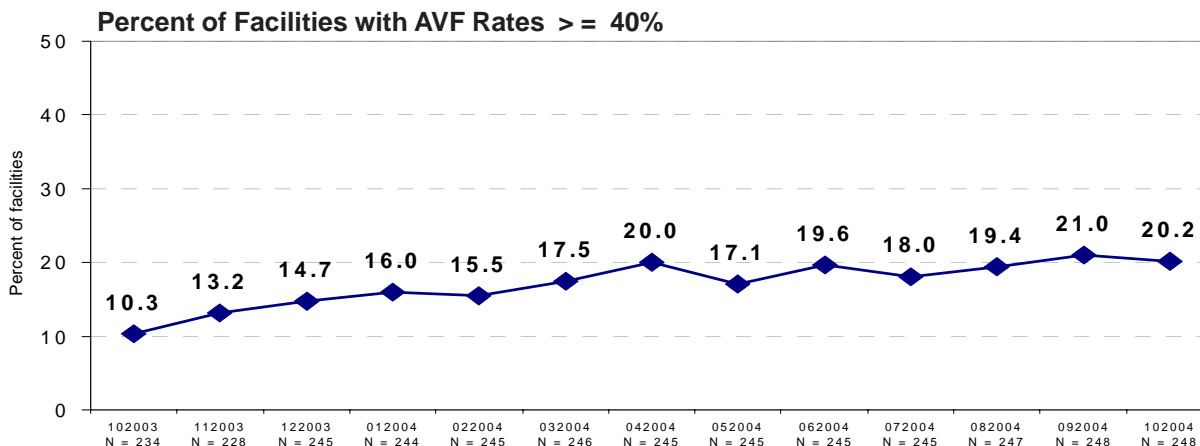
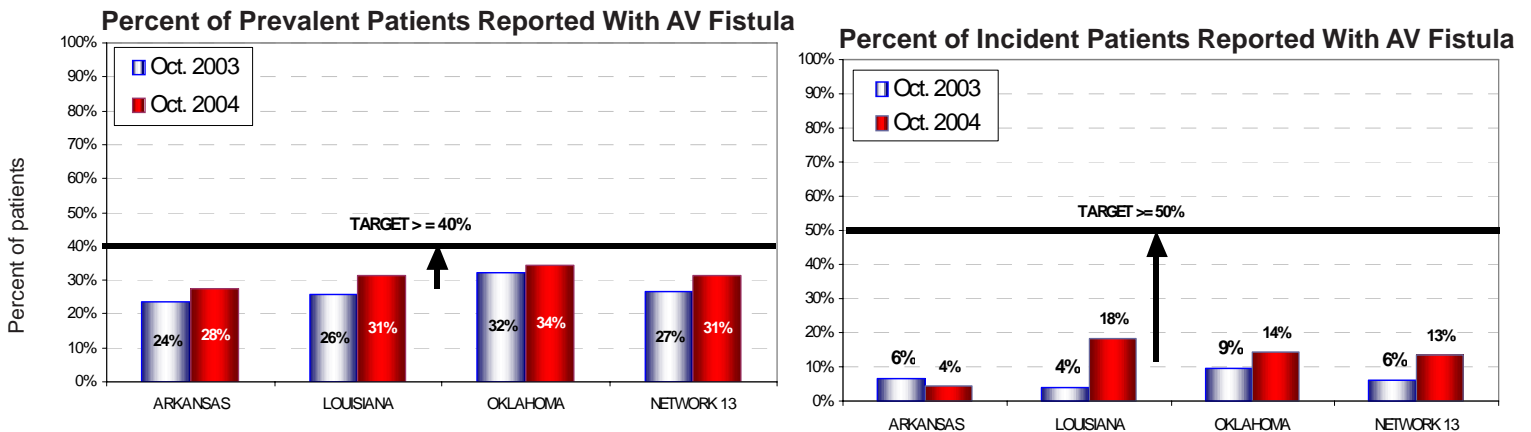
- 1. 40% of prevalent hemodialysis patients utilizing AVF's as primary vascular access.***
- 2. 50% of incident (new) hemodialysis patients utilizing AVF's as primary vascular access.***



## National Vascular Access Improvement Initiative - "Fistula First"

In July 2003, ESRD Network 13 began a three-year quality improvement project to increase the placement and utilization of arteriovenous fistulas (AVF) in the states of Arkansas, Louisiana, and Oklahoma. This project "Fistula First", is part of a national collaborative effort sponsored by the Centers of Medicare & Medicaid Services (CMS).

We are glad to report that IMPROVEMENT is occurring throughout the Network. Please be looking in your mailbox for a "Trends Report: 2003-2004", as well as facility-specific vascular access reports. The "Trends Report" will be on a CD and your facility-specific reports will be hard copies. Please contact the Network office if you don't see yours soon. In the meantime, here are some comparative trends for your information...



### Dialysis Facilities Maintaining Their AVF Prevalence Rates >= 40% Throughout Initiative to Date of Report

PROVIDER #	FACILITY NAME	CITY	STATE
042536	SOUTH ARKANSAS KIDNEY CTR-EL DORADO	EL DORADO	AR
192501	FMCNA-BATON ROUGE	BATON ROUGE	LA
192539	FMCNA-NORTH BATON ROUGE-AIRPORT	BATON ROUGE	LA
192558	FMCNA-WEST BATON ROUGE	BATON ROUGE	LA
192574	FMCNA-THIBODAU	THIBODAU	LA
192581	GAMBRO HEALTHCARE-NEW ORLEANS UPTOWN	NEW ORLEANS	LA
370114	ST JOHN KIDNEY DIALYSIS CTR-DIALYSIS	TULSA	OK
372512	DAVITA-TAHLEQUAH	TAHLEQUAH	OK
372546	DAVITA-CENTRAL TULSA	TULSA	OK
372547	DAVITA-MIAMI	MIAMI	OK
372555	FMCNA-WOODWARD	WOODWARD	OK
372560	DAVITA-SAPULPA DIALYSIS	TULSA	OK
373508	ST JOHN KIDNEY CTR-N HARVARD	TULSA	OK



# Network 13's Spring Mentoring Workshop

A **NEW** and exciting workshop is being planned for Spring 2005. Shreveport, Louisiana will host a two-day CEU workshop. (There will not be separate workshops held in Oklahoma or Arkansas this spring). The workshop will be for nurses, social workers, and dieticians. There will also be a one-day (March 25th) surgical course on Vascular Access for physicians.



## Workshop topics will include:

1. Secondary hyperparathyroidism and hyperphosphotemia;
2. DOPPS Morbidity and Mortality;
3. Optimizing dry weight;
4. Surviving as a expert witness;
5. Social workers in action;
6. Water quality in reverse osmosis;
7. Kidney-pancreas transplant;
8. MUCH MORE!

The workshop is scheduled for March 24 - 25, 2005 at the Isle of Capri® Casino & Hotel, Bossier City (Shreveport Area) Louisiana. Hope to see you there for an exciting time.

## News You Can Use

# NEEDS YOU!

The Professional Newsletter is published quarterly by the staff of ESRD Network 13. The next edition is scheduled for Spring/April 2005. If you are interested in contributing to this newsletter, please call us at **405.942.6000**, fax us at **405.942.6884** or send any articles, materials and/or ideas to:

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