

Reach helps patient delay dialysis two years, transition smoothly to in-center hemodialysis

BY SUSAN AFFLECK

In October of 2012, at age 62, Toni Barboza was in late stage 4 of chronic kidney disease when her nephrologist referred her to Reach Kidney Care of the Chattahoochee Valley. As a Reach patient, Toni was educated about normal renal function, causes of renal failure and treatment options. She paid close attention to the steps she could take to preserve the kidney function she had left in hopes of delaying the start of dialysis treatment as long as possible. Knowing that dialysis treatment may be in her future, she carefully considered all her options and then selected in-center hemodialysis as the treatment that best suited her lifestyle.

Having chosen in-center hemodial-

SEE TONI, PG. 3



The Chattahoochee Valley Reach Care coordinator, Susan Affleck, left, smiles alongside Toni Barboza during an in-center hemodialysis treatment. Barboza credits Reach for her preparation.



Left to right: Eduardo Alas, MD, Veronica Niedzinski, RD and David Buchwald, MD are all members of the Kidney Care cycling club.

Reach Kidney Care of New Mexico shares success, other updates

BY CHARLES CAMPBELL

Reach Success in Numbers

Reach Kidney Care of New Mexico recently added its 100th patient; we are currently serving 107 patients with chronic kidney disease as of Aug. 31. The program outcomes continue to fall in line

with national averages. Patients enrolled in the Reach program in New Mexico are three times more likely to start dialysis with a fistula, three times more likely to choose dialysis at home, two times more likely to start dialysis as an outpa-

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Reach Kidney CareSM

Real Engagement Achieving Complete Health

The “Fab Five” of CKD



The Reach Kidney Care team in Colorado has a unique situation. Instead of appointing one coordinator for the program, they have opted to combine the expertise of their five registered nurses — (left to right) Mary Davenport, ANP, Grand Junction; Kristin Chillemi, RN Administrator, Grand Junction and Montrose; Shannon Ferguson RN, Nurse Manager, Grand Junction; Deanna Gibbs RN, Montrose; and Leah Hearst, RN Montrose — to provide chronic kidney disease education.

Reach education helps patient avoid serious medication mishap

BY ED DENNIS

Frank Pennington, a Reach patient with an eGFR of 23, was recently in a rollover motor vehicle accident. He went to a local emergency department for evaluation and treatment. Fortunately, he had no serious injuries and was discharged from the ED. Doctors prescribed Ketorolac for pain.

He remembered learning about medications and

CKD, specifically nonsteroidal anti-inflammatory drugs (NSAIDs), which can advance the progression of chronic kidney disease. When he filled the prescription, he read that this was in the class of NSAIDs. He called Reach before taking the medication, and we confirmed his concern.

Reach plans to educate local emergency departments to avoid possible complications in the future.



Reach Kidney Care coordinators Christa Lawson and Ed Dennis represent Reach at a Walgreen's health fair in Nashville Oct. 7.

TONI, FROM PG. 1

ysis, Toni recognized the need for fistula placement as soon as possible. Toni's concern was that her insurance was due to expire in December 2012. When her situation was explained to the fistula-friendly surgeon, he moved everything into high gear to ensure that Toni got her fistula before her insurance coverage expired.

Following surgery, Toni's fistula matured nicely. Toni adhered closely to the recommendations for controlling

her blood pressure; following the dietary modifications as directed by her nephrologist; avoiding NSAIDs and keeping her nephrology follow-up appointments. Her efforts resulted in her ability to delay the start of dialysis for nearly two years after her first visit to Reach Kidney Care.

On July 30, 2014 Toni started dialysis. Her first treatment took place in the outpatient clinic using her mature AV fistula. Toni was able to avoid hospitalization and a dialysis catheter for the initiation of her dialysis treatments. She

reports that she is feeling much better and is regaining her strength, energy and appetite.

Toni Barboza is a perfect example of the mission and goals of Reach Kidney Care. Through education and support, Toni became an active participant in her care plan. With the knowledge she gained, she made decisions about her health that will have lasting positive impacts. She is confident in her plan of care moving forward knowing she is the most important part of her healthcare team.

UPDATE, FROM PG. 1

tient in a clinic rather than in a hospital and three times less likely to start dialysis with a hemodialysis catheter. With all of these successes we know we can help even more.

Cuba, New Mexico, Grand Opening

DCI recently celebrated the opening of its newest clinic in Cuba, N.M., and Reach was there for the celebration. I was able to meet with providers from the local health clinic. They were very excited to hear about the benefits of the Reach program for their many patients with CKD. With the addi-

tion of the Cuba clinic, we are extending our Reach to a total of five CKD clinics and hope to gain the support of the medical community to begin seeing patients at an additional three clinics.

San Felipe Pueblo Presentation

I was recently honored to receive an invitation to give a presentation to a group of Native American elders from the San Felipe Pueblo. For those of you who do not know, New Mexico has a total of 19 Pueblos and three reservations. The elders received the response to the presentation on "Strategies

for Prolonging Kidney Function," and all participants were very engaged and genuinely interested in increasing their knowledge base. The question and answer session alone lasted almost an hour.

Kidney Care Cycling Club

In other news, our informal Kidney Care Cycling Club continues to meet almost every weekend for rides out in the mountains or around town here in Albuquerque. These rides provide a great opportunity to informally discuss issues surrounding CKD and the Reach program. Recently, Dr. Buchwald and I participated

in the Tour De Tolerance in El Paso, Texas. The tour proceeds benefit the Holocaust Museum in El Paso. Upcoming tours include the Tour De Acoma to benefit the tribal members of the Acoma Pueblo; the Day of the Tread, which benefits Casa Esperanza, a non-profit organization offering housing to low-income patients suffering from CKD and cancer; and Tour De Tucson to benefit Special Olympics. Current members of the Kidney Care Cycling Club include myself, Veronica Niedzinski, R.D., David Buchwald, M.D., Kamran Shaffi, M.D., Mark Unruh M.D., and Eduardo Alas M.D.



Walkers and volunteers celebrate the 2014 National Kidney Foundation Billings Kidney Walk June 29.

Increasing medication adherence

CKD patients face many challenges on a daily basis. One of these challenges is managing a long list of medications needed to treat multiple disease states and comorbid conditions. The average medication list for a patient with chronic kidney disease requiring dialysis consists of ten to twelve medications.¹ It is common for these medications to be dosed several times daily requiring multiple pills at each dose. It is estimated that only 40-50% of patients are adherent with long-term medications and greater than 30% of medication related hospitalizations are due to lack of adherence.² Improving medication adherence will increase positive health outcomes and reduce the number of hospitalizations.

Here are several things you can do to help your patients:

Explain the medication

Adherence can be greatly improved by ensuring that the patient knows why they are taking their medications. Educating patients on how their medications are helping them is critical. Many patients say "I don't feel any different. Why do I need to take this?" As humans, we tend to reason things out and form associations. If there is no reasonable association available, we may discard the idea or process as unnecessary or wasteful. Knowledge is power, and simply providing an association between the drug and potential benefits can help improve medication adherence.

Limit pill burden/administration frequency

There is an inverse relationship between the number of medications and adherence. That is, as the number of

pills or number of doses per day increases, adherence decreases. The table below illustrates the percent reduction in adherence when the frequency of administration is increased from once daily to four times a day. Prescribe medications for your patients that offer the lowest number of pills taken as few times a day as possible.

Prescribe generic medications

Reduction in Adherence Associated with Increased Dosing Frequency³

Once daily:	Referent
Twice daily:	-6.7%
Three times a day:	-13.5%
Four times a day:	-19.2%

A major contributor to non-adherence is that patients may not be able to afford their medications. Prescribing medications that have a generic alternative available may increase the chance that a patient will pick up their medications.

Maintain an accurate medication list

Just because a drug is prescribed for a patient does not mean the patient is taking it. On the other hand, just because a patient is taking a drug does not mean he or she should be taking it. At each visit, ask if the patient has started or stopped any medications, including over-the-counter, vitamins, or herbal products. Medication reconciliation is an opportunity to counsel patients on

medications most appropriate for them.

Talk with the patient

Medication adherence is a glaring issue. Each clinic visit is an opportunity to assess patient adherence to medications. Ask if patients are taking all medications properly. If not, there may be an underlying cause. The patient may not like the taste of a medication or may experience negative side effects. These are issues we can resolve and would not know if we do not communicate with the patient on a regular basis.

Demonstrate caring

It is important to recognize the stress and hardships patients may be experiencing at this point in their lives. Patients may find it difficult to adhere to a medication regimen. Sympathize with them and let them know that you are here to help work through their issues.

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Velphoro® (sucroferric oxyhydroxide) – A new iron based phosphate binder

Problem:

Mineral bone disorders are a common problem in patients with kidney disease. Through declining kidney function comes a lesser ability to process and handle elements like calcium and phosphorus in the body. This imbalance causes bone abnormalities

that can progress and cause fractures or other complications. Phosphate binders play an important role in therapy as they help decrease the amount of phosphorus absorbed from the diet. Traditional phosphate binders are based on elements like calcium, aluminum, or lanthanum and require mul-

iple tablets to be taken with each meal. Velphoro® (sucroferric oxyhydroxide) is a novel agent aimed at tackling the barriers to adequate phosphate control.

General information:

Gaining initial FDA approval in 2013, sucrofer-

ric oxyhydroxide is the first calcium free, iron based phosphate binder. Sucroferric oxyhydroxide works by forming complexes between phosphate taken in from a patient's diet and the active form of the drug, polynuclear iron (III)-oxyhydroxide. This

SEE VEL, PG. 7

Brand	Generic	Uses	How supplied	ESRD dose	Interactions	Counseling points	Notes	Average Wholesale Price per 30 days (Cost/unit)
Velphoro®	Sucroferric oxyhydroxide	Control of serum phosphorus	500mg chewable tablet: berry flavor	Initial: 500mg TID with meals Usual titrated: 1500-3000mg TID with meals	Bisphosphonates, levothyroxine, tetracycline derivatives, vitamin D analogs (oral)	-Tablets must be chewed or crushed. -May cause diarrhea or discoloration of stools.	-Studies have shown that 1 tablet with meals may be sufficient to control phosphorus.	\$1026-\$2052 (\$11.40/tablet)
Renvela®/ Renagel®	Sevelamer	Control of serum phosphorus	Renagel: 400mg, 800mg oral tablet Renvela: 800mg oral tablet, 800mg oral packet	Initial: 800-1600mg TID with meals Usual titrated: 1600-2400mg TID with meals	Quinolone antibiotics (oral), levothyroxine, mycophenolate, calcitriol	-Swallow whole, do not chew or crush -May cause constipation or abdominal pain	-Max studied dose of 13g/day -Causes GI upset at higher doses	Renvela: \$417.28-1251.84 (\$4.64/tablet) Renagel: \$521.62-1043.24 (\$5.79/tablet)
PhosLo®/ Phoslyra®	Calcium acetate	Control of serum phosphorus	PhosLo: 667mg oral capsule Phoslyra: 667mg/5mL oral solution	Initial: 1334mg TID with meals Usual titrated: 2001-2668mg TID with meals	Calcium salts, bisphosphonates (oral), ceftriaxone, tetracycline derivatives, quinolone antibiotics (oral), etc.	-Avoid calcium containing products -May cause nausea and vomiting	-Has potential to cause hypercalcemia -Often requires multiple tablets/meal to control serum PO4	Calcium Acetate: \$142.12-184.78 (\$0.78-\$1.03/capsule) Phoslyra: \$182.66 - \$365.32 (\$0.20/ml)
Tums®	Calcium carbonate	Antacid/control of serum phosphorus	Tums: 500mg, 750mg, 1000mg chewable tablet Other: various formulations	Dose not to exceed 2g/day	Calcium salts, bisphosphonates (oral), allopurinol, levothyroxine, etc.	-Take with meals -Avoid calcium containing products	-Has potential to cause hypercalcemia -Low potency for phosphate binding	500mg tablet \$1.28-6.75 (\$0.01-0.08/tablet)
Fosrenol®	Lanthanum	Control of serum phosphorus	500mg, 750mg, 1000mg chewable tablet	Initial: 500mg TID with meals Usual titrated: 1500-3000mg TID with meals	ACE inhibitors, Statins, quinolone antibiotics (oral), levothyroxine, tetracycline derivatives	-Must be chewed or crushed, do not swallow whole -May cause GI upset	-Has potential for accumulation in bone/other tissue -contraindicated in bowel obstruction, ileus or fecal impaction	\$934.68 (\$10.39/tablet) Each tablet same price
Amphojel®	Aluminum hydroxide	Control of serum phosphorus/antacid	320mg/5mL oral suspension (Gel)	Initial: 300-600mg TID with meals	citrate/citric acid, Vitamin D analogs, ascorbic acid, bisphosphonates, levothyroxine, etc.	-May cause constipation or discoloration of stools	-Do not use with citrate based products -Risk of heavy metal toxicity -Very potent phosphate binder	\$5.33-10.66 (\$0.01/ml)



MEDICATION TIPS FOR PATIENTS

Taking all of your prescribed medications may seem like a very difficult task. You may have several different life issues that you must handle throughout the day that make it difficult to remember to take your medications. We understand that it is not easy, but here are a few tips that may help:

Organize

While taking medications from the prescription vial verifies you are taking the correct medication and contains all of the important prescribing information, you may find it easier to organize medications in a pill container. This helps separate doses by time of day and can help you remember all the medications that should be taken at that time of day. It also reduces your workload as you do not have to go through each bottle to find what medications need to be taken at that time.

Establish times

With multiple medications it is important to set times to take your medications

that work with your schedule. Setting times each day will reduce the number of missed doses and reinforce a habit of taking your medications.

Place your medications somewhere you can see them

Many people place their medications in the cabinet where it is out of sight. We have all heard the saying “out of sight, out of mind.” This applies to medications too! Place your medications near an item or task that you know you will be using or performing each day. Remember to keep your medications out of reach of children and pets!

Implement tools

There are many tools available to help increase adherence. These tools may include: medication calendars, frequently updated electronic or paper medication lists, and alarms or reminders set on phones or other devices. There are also programs offered by most pharmacies that automatically refill prescriptions monthly,

thus ensuring that all medications are consistently filled.

Keep track of your medications

Keep an accurate list of all of the medications you take including over the counter products, vitamins, and herbal supplements. Keep track of when and how you take each medication. Keep this list in your wallet or purse so you can easily refer to it and share it with your healthcare team. Notify your healthcare team if there is any change so they can update their records as well.

Speak with your Reach team

If you are ever confused about your medications or health care, your Reach team is available to answer any questions for you. Do not be afraid to ask your nurse, doctor, care coordinator, social worker, or pharmacist for help! They want to ensure you are receiving the best care possible. It is very important to communicate any concerns you may have with them. The Reach team will help you address your concerns.

Velphoro® – A New Option in Phosphate Control

Mineral bone disorders are a common problem in patients with kidney disease. As your kidney function decreases, it becomes harder for your body to process and handle calcium and phosphorous. This can cause abnormal changes in your bone, making it weaker and easier to damage. One class of drugs used to treat mineral bone disorders is phosphate binders. Phosphate binders help the body decrease the amount of phosphorous absorbed from the diet. This results in better control of calcium and phosphorous. There are several phosphate binders available currently and recently a new phosphate binder was made available.

Velphoro® (sucroferric oxyhydroxide) is a new phosphate binder that uses a different chemical compound containing iron to bind phosphate. This is different from all other binders on the market as they are usually based on calcium, aluminum, lanthanum, or other chemicals. Velphoro® does not contain calcium and has no effects on calcium levels. Velphoro® has been shown to use fewer tablets to control phosphate levels when compared with traditional phosphate binders, such as PhosLo (calcium acetate), Renvela, Renagel, and Fosrenol. These features may set Velphoro apart from other phosphate binders.

Here are some common

questions regarding Velphoro® therapy:

How much does Velphoro® cost?

Velphoro® costs range between \$1,026 - \$2,052 monthly. It is important to check with your insurance provider to make sure Velphoro® is covered.

How do I take Velphoro®?

Velphoro® is taken by mouth with meals. Tablets must be fully chewed and cannot be taken whole. If you have problems chewing, you can crush the tablets prior to use.

What is the normal dosing of Velphoro®?

You should always take

Velphoro as prescribed, but it is commonly started at a dose of one 500mg tablet with the three largest meals of the day.

What are the side effects of Velphoro®?

The most commonly seen side effects with this medication are darkened stools (12-16%) and diarrhea (4-24%). The percentages are the percent of people who experienced these side effects in studies.

Who should use this drug?

Velphoro® should be taken by patients on dialysis who need better control of phosphorous levels as determined by their doctor.

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active compound is a potent phosphate binder and is minimally absorbed into the body. Sucroferric oxyhydroxide is taken orally with the three largest meals of the day. The tablets must be chewed, and may be crushed if the patient is unable to chew them effectively. Sucroferric oxyhydroxide is initially dosed using one 500mg tablet three times daily, resulting in a total daily dose of 1,500mg. Dose adjustments are made by increasing the total daily dose by 500mg (1 tablet), until a serum phosphorus of <5.5mg/dL is achieved. Trials establishing safety and efficacy did not study doses above 3,000mg. Common adverse effects caused by this drug are diarrhea (2-24%) and discoloration of stools (12-16%).¹

Cost:⁴

- AWP (Average Wholesale Price) = \$11.40/tablet
- AWP for 90-count bottle = \$1,026

Place in therapy:

Effective phosphate binding is often hindered by high pill burdens and adverse effects due to accumulation of drug.

Aluminum and lanthanum are potent binders, but are thought to be associated with accumulation and heavy metal toxicity. Calcium based binders often require several pills with each meal and increase a patient's risk of hypercalcemia. Sevelamer is often well tolerated but has been shown to require multiple tablets. Through these faults in current therapy we see the benefits of iron based phosphate binders such as sucroferric oxyhydroxide. Phase II studies have shown the absorption rate of sucroferric oxyhydroxide in CKD patients to be 0.04%, resulting in minimal accumulation.² Also, phase III trials directly comparing the efficacy to that of sevelamer have shown fewer tablets required to attain adequate phosphorus levels (3.6 tablets/day vs. 8.7 tablets/day).³

From the preliminary data, we see that sucroferric oxyhydroxide is a promising new agent that may address phosphate binder associated pill burden. Its unique active compound and reduced dosing requirements make it a viable option for phosphate control. However, judicious use is warranted as its monthly cost ranges \$1,026 - \$2,052.⁴ Additionally, prescribers should be aware that patient's

drug plans may require prior authorization or step therapy with less costly phosphate binder(s) before sucroferric oxyhydroxide use. As the use of this medication increases, we can further evaluate its place in therapy.

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