Home Hemodialysis Enhances Patients’ Health and Quality of Life

By Brigitte Schiller, MD
Chief Medical Officer
Satellite Healthcare

and

Allan Collins, MD
Director of Chronic Disease Research Group (CDRG) and Professor at the University of Minnesota. Senior Medical Advisor for NxStage Medical, Inc., Executive Director of the Peer Kidney Care Initiative.

In August, Satellite Healthcare - WellBound division patient Elias Arciniega visited several regional centers in California to promote the benefits of home hemodialysis by administering his own dialysis in an RV using a NxStage System One. The 39-year-old resident of Hollister, Ca. has seen vast improvements in his own health and wellbeing since beginning home hemodialysis six years ago – including improved blood pressure, increased energy, improved appetite and greater self esteem. “It’s like night and day,” Elias said of home hemodialysis compared to the in-center treatments that he received for years. “I even got my color back, started getting the pink cheeks again.”

Patients with chronic kidney disease (CKD) commonly report such benefits when transitioning from in-center to home hemodialysis. Patients undergoing in-center dialysis – which is administered 3 days a week, for 3 to 4 hours at a time – often encounter fluid management issues due to the prolonged interval between dialysis treatments. Therefore blood pressure control is often impaired harming blood vessels and the heart; Thrice weekly hemodialysis is also less effective at preventing the buildup of chemicals such as potassium, sodium and phosphorus in the blood. More regular home hemodialysis treatments (administered 5 to 6 days a week for 2 to 3 hours) minimize these issues and result in a much faster recovery rate. Within weeks of transitioning, patients say they are more active, sleep better and have fewer depressive symptoms. They are also less likely to experience Restless Leg Syndrome – a condition presenting in some 15 percent of dialysis patients.1 In the long-term, patients see a significant reduction in cardiovascular hospitalization and mortality due to cardiovascular disease – the most common complication of chronic kidney disease – in comparison to both traditional hemodialysis patients and those undergoing home peritoneal dialysis.2,3,4 The resulting cutbacks in hospitalizations, medications, and health complications can lower overall health costs for patients and providers, while reducing demand on the medical system as a whole.

Making this transition is becoming easier, thanks in part to Satellite Healthcare’s long-term partnership with NxStage Medical. Patients such as Elias are trained at Satellite’s WellBound Centers to use the System One; once they’re comfortable with inserting the needles and administering the treatment on their own – usually within 2 to 4 weeks – they do so at home with a partner. The NxStage System One is about 1/10 the size of a traditional hemodialysis machine, weighing roughly 70 pounds and just over a foot tall. It sets itself up automatically, uses standard electrical outlets, requires no special plumbing modifications and can be taken as a carry-on when flying. While costs vary depending on individual preferences and medical coverage, Medicare pays for 80 percent of the expenses associated with dialysis treatments for those
suffering from CKD, whether in-center or at home.

Many patients are thrilled with the flexibility and lifestyle balance that home hemodialysis provides. When Elias first began traditional dialysis at Satellite’s center in Gilroy, he saw an immediate reduction in fluids. But when a kidney transplant in 2000 ultimately failed and he returned to dialysis six years later, he found himself leaving the center late at night after long days working construction. He would often go days without seeing his five children, and it took him a good 48 hours to recover from each treatment. When Satellite’s researchers approached Elias about the possibility of doing dialysis at home, he agreed – and within two weeks of training, he was off four different blood pressure medications. After 3 weeks, he was administering his dialysis at home while helping his children with their homework, and he is proud to have never missed a child’s field trip or awards ceremony. “It’s been all around better for my whole family,” Elias said.

As demand for dialysis places a growing strain on the U.S. healthcare system, the trend toward home hemodialysis will not only cause vast improvements in patients’ lives, but will also help address the infrastructural limitations of dialysis facilities. The number of Americans aged 30 years or older with CKD is projected to increase from 13.2% currently to 14% in 2020 and 16.7% in 2030. And as patients learn more about the benefits of home hemodialysis – including the possibility of leading a more active, more fully rehabilitated lifestyle – they will likely tend toward home hemodialysis as their preferred option. A collaborative effort of physicians, manufacturers and patients – those who are best able to communicate their experience to others – will prove beneficial in the long-term for both patients and the medical system as a whole.

Elias, who calls home hemodialysis “the next best thing to a kidney transplant,” was happy to take his family on the road to share the good news during his recent RV tour. “I like to see if I can motivate people,” he said. “To let them know that there’s another option.”

As more patients make this transition, Satellite Healthcare and NxStage Medical will continue to explore developmental options for the home hemodialysis model, and to make this preferred modality available to as many patients as possible. In December 2014, the NxStage System One became the only machine to obtain FDA approval for nocturnal use; patients typically administer the treatment 5-6 days a week, for 8 hours while they are sleeping. Many nocturnal dialysis patients not only report lifestyle benefits from the reduced constraints on their schedule, but also an amplification of the physical benefits typical to home hemodialysis due to the extra hours spent on the machine. As is common with the transition from in-center to home hemodialysis, patients often don’t even realize how sick they were feeling until they experience the changes in blood pressure, energy levels, and overall health and wellbeing for themselves. “Now that I’m doing this treatment at home I don’t ever get sick,” Elias said of his home hemodialysis. “It’s a game-changer.”

Thanks to the availability of Satellite Healthcare - WellBound home training centers, the simplicity of the machine, and the willingness of patients such as Elias to share their stories, an increasing number of patients are choosing home hemodialysis. There are five times more patients using home hemodialysis than there were a decade ago; that number has increased from 1,563 in 2002 to 7,923 in 2012 according to the U.S. Renal Data System. While this still represents a small percentage of the 443,119 patients on dialysis, Satellite Healthcare is ahead of other providers, with roughly 3 percent of their dialysis patients on home hemodialysis, in comparison to the national average of roughly 2 percent.


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