Dialysis care seems to be moving into an era of more patient choice predicated on the idea of more frequent dialysis, whether it be peritoneal dialysis, home hemodialysis or nocturnal dialysis. The rising patient population and a constricted reimbursement environment are just two factors that could affect the trajectory of more frequent dialysis. To understand the current situation a little better, RBT asked the following experts their take on more frequent dialysis.

- Wayne A. Evancoe, CEO and renal administrator, and Shari Meola, RN, CNL, clinical services coordinator, from Hortense and Louis Rubin Dialysis Center, Inc.
- Dr. John Moran, DaVita vice president of clinical affairs—home therapies
- Brigitte Schiller, MD, chief medical officer, Satellite Healthcare

What are the benefits of more frequent dialysis, and are there any caveats people should be aware of?

Evancoe and Meola: Physiological. More time on dialysis study data has—and is—showing direct benefits of longer, gentler dialysis, especially gentle dialysis, is better. Many physical side-effects or co-morbidities of CKD Stage 5 can be avoided or improved via HHD and PD use.

Economic. Home patients do not have the travel related costs of attending a center three times/week. They also have fewer or no co-pays by most insurance. Lifestyle. HHD & PD patients have greater diet and fluid flexibility, and can schedule their own treatments during the day or evening to allow more family, work, travel or socializing. Taking control of the disease by self managing can be rewarding for many.

A reality. The HHD patient’s caregiver, spouse or partner can see increased work and stress in assisting. Not always, but both parties must understand the level of work, expectations and commitment needed for a successful HHD life at home in advance. It can become a significant change in the home dynamic.

The clinical view: Liberalization of diet and fluid restrictions is minimal with overnight dialysis, there are almost no restrictions. We often see reduced use of ESAs; BP meds; phosphate binders. No longer does the disease “control” patient and family.

Schiller: Patients undergoing more frequent HD (MFD) mainly at home have improved BP, shorter time to recovery after dialysis (less symptoms of feeling “washed out” after dialysis). Significantly better survival has been shown in a cohort of patients undergoing nocturnal HD at home by the Toronto group, where outcome in the nocturnal HD patients was comparable to patients undergoing a cadaver kidney transplant. Retrospective observational studies show that short daily HD both at home and in-center has better survival compared to thrice weekly conventional HD—but these are not randomized data. Sleep disturbance and restless leg syndrome was found to be improved in patients who switched to six days per week home HD. Depression was also improved after 4 months. With more frequent HD fluid control can be achieved easier as fluid removal is challenging with the current conventional thrice weekly approach.

Moran: I always start my presentations with showing one of the last articulated Belding Scribner published before he died, which asked, “Why do we dialyze three times a week?” Essentially, it’s an accident of history. When Belding Scribner started all this, they were hand making machines, and they found that three days was the minimum they could get away with, and they wanted to get away with the minimum so they could offer it to more people. People say to me, “What’s the evidence that six days is better than three?” And my first reply is “What’s the evidence that three days is better than six?” Six days a week, you essentially have to do it all the time. Not many people want to come to the centers six days a week, and not many centers want to dialyze people six days a week. You have to be able to do it yourself. You have to have a home. You have to be trained on how to set up a machine, manage blood pressure and fluid balance. Doing it six days a week gives you the benefit of six days a week. Excellent fluid control, blood pressure control, much better phosphate control. It’s a part-time job. I think the best thing we can offer people is nocturnal dialysis. I think you get better dialysis because you’re getting longer dialysis.

What advice would you give clinic thinking about setting up a program for more frequent dialysis?

Evancoe and Meola: It’s an investment, not an expense. First, a facility must invest in training and/or hiring home training staff to manage and execute the program. Of course, MD oversight must occur, but a staff should have relevant experience, must be focused, committed, and have a sense of humor! A program also will not “break-even” for a period until significant revenue exceed expenses—so patience, energy, and belief are needed for that “break-up” period.

MD champion(s). An HHD program needs nephrologists that believe in and support the effort and investment because they understand the clinical results for their patients. Strong internal MD support must be able to get a program through rough periods, convince boards, influence budgets, create referral partners, and inspire/support hardworking staff.

The clinical view: Start slow; prepare to make and learn from mistakes. Form your team—pick an RN who loves caring for patients one-on-one, and believes in home modalities; internal MD support can get a program through rough periods, convince boards, influence budgets, create referral partners, and inspire/support hardworking staff.

Schiller: Patients who do not achieve dry weight may benefit from more frequent HD. Setting up more frequent HD in center is challenging and patients should be evaluated for their suitability to undergo home HD.

Moran: It’s more expensive because you can’t do reuse in the home, so you’re using disposable six-days-a-week (dialyzers). There’s the burden of setting up the machine and taking down the machine. It has to be part of a complete home program. My ideal is that home should be the default option for the patient. The patients should be given the pros and cons of peritoneal dialysis or home hemodialysis. In this country, the default option is in-center, three times a week. I would like to see many more people at home. The reason you need to have it as part of a complete program is that new patients who have never been on dialysis almost always choose PD when they go home. It’s simpler, the training is much shorter, they can travel, no complex machine, whereas the vast majority of home hemo patients are patients who have been on in-center hemodialysis and understand the benefits of being able to do it more frequently.

Can the concept work with the new bundled payment; if not, what needs to be done?

Evancoe and Meola: Economics. A HHD and/or PD program may well assist smaller organizations to survive under the bundle. If less medication (EPO), staff time, and overhead are used, it may produce a margin to operate with for smaller providers; lower cost per patient will be vital.

The future. If accountable care organizations (ACOs) and the “global capitated reimbursement” idea take hold long term, then a cost effective home dialysis therapy partner that yields improved clinical results, and reduces consumption of hospital inpatient time, procedures, expensive meds, and staff cost will prosper and be a valued component in a global system. HHD and PD patients accept a large role in their own care and that yields good clinical, economic, and quality of life results over time. HHD technology will get even better and more mobile—and greater emphasis on ease/portability of therapy delivery and patient/family lifestyle needs should also increase.

Schiller: More frequent HD is administered to patients whose medical condition demands more frequent HD. It is easier accomplished in the home setting, but not all patients are suitable for home HD therapy and therefore efforts are made by providers to facilitate MFD in center as possible.

Moran: The bundle has the same flaw as the prebundled payment system in that Medicare will only reimburse providers for three treatments per week. And regardless of the modality, Medicare reimbursement still falls short of covering the cost of treatment. That said it will always be important to DaVita to be able to offer treatment options for patients.