

## Inside this issue:

Myth Busters of Peritoneal Dialysis	2
Accelerating Home Dialysis Education	4
New Guidelines for Home Dialysis	6
NIH Evaluate COVID-19 Home Testing Kit	7
Kidneys from Deceased AKI Donors found Safe, Effective	8
COVID-19 Protocol Linked to Reduced CVC-Related Infections in HD Patients	9

## Hindsight is 2020

I think that phrase gained new meaning following the *year* 2020. We saw—in this country—a whole new way of living; a new way of being; a new way of working, playing, educating, vacationing. As we look back on the year that was 2020, what are some things we should continue to incorporate in our lives.

First on my list is the importance of being with family. While we were not able to visit, we should have definitely grown to appreciate the family we were with on a daily basis. The value of being able to communicate with love and forgive shortcomings is one of the lessons I learned and will continue to cherish going forward.

Second is the importance of being

comfortable with yourself. I believe the people who suffered the most from the lack of *busy*-ness are those who have not yet come to appreciate the value of being alone. I highly recommend reading and practicing positive affirmations and mindfulness. Learn to sit with uncomfortable thoughts for a minute and not rush to people or things to pretend the thoughts do not exist. *If you are overwhelmed by being alone, I do recommend seeking professional help.*

The third thing I will mention is the value of quality over quantity. As long as we maintain connections with the people who really matter to us, we can get through difficulties and build much better, stronger relationships.



*ESRD Patient News, a publication of The Carlisle-Williams Foundation, Inc., informs our readers of issues important to management and understanding of their disease and furthers the Foundation's mission of providing hope and support to ESRD patients. We welcome and encourage feedback. Email [Editor@esrd-patient-support.org](mailto:Editor@esrd-patient-support.org) or "Contact Us" on the website. Thank you!*

# ESRD Patient News

---

## Home Dialysis—Myth Busters of Peritoneal Dialysis

Peritoneal dialysis (PD) is associated with improved quality of life, is cost effective, and has outcomes comparable with those of hemodialysis (HD). Despite this, there is a big discrepancy in the percentage of US patients using PD: 10.1% versus HD at 89.9%. One reason for this difference is likely the number of myths surrounding appropriate PD candidates. These myths are often based on tradition or authority as opposed to evidence. Ready acceptance of such beliefs without re-examining them can lead to improper care. A myth we noted in a previous article in this series is the negligible mortality difference between HD and PD. This month, our post will focus on candidacy for PD and the circumstances in which it is believed to be inferior or inadvisable.

### **Myth 1: PD is not a good option for patients with diabetes**

Concerns over hyperglycemia and peritoneal dextrose absorption are not unfounded; however, studies comparing the outcomes in diabetic patients using both dialysis modalities have not consistently shown a superior modality.

### **Myth 2: PD is not a good option in obese patients**

A second misconception is that body habitus may preclude the use of traditional exit sites. Presternal exit sites are good options for obese patients who are motivated to use PD. Although the implantation technique is more difficult, the disadvantages in comparison with a traditional catheter are minimal.

### **Myth 3: PD is not a good option for patients with autosomal-dominant polycystic kidney disease (ADPKD)**

Many practitioners avoid PD in patients with ADPKD over a concern about increased intra-abdominal pressure. A systematic review and meta-analysis of 12 studies in 17,040 patients found no significant differences in adequacy, technique failure, or PD-related complications between those with ADPKD and those without.

### **Myth 4: PD is not a good option for elderly patients**

Elderly patients have several perceived barriers that preclude PD as a viable dialysis option. Some of them include visual impairment,

## Home Dialysis—Myth Busters of Peritoneal Dialysis

restricted dexterity, and mild cognitive impairment. However, if PD is the patient's modality of choice, it is important to recognize that these issues can be overcome with extended training or assisted PD. Currently, there is no general recommendation about an ideal dialysis modality for this population.

### **Myth 5: PD is not a good option for patients who have experienced kidney graft failure**

Individuals requiring dialysis after graft loss are believed by some to be poor candidates for PD. This outlook may be due to prior surgery, immunosuppression, and less predictable residual kidney function. Four analyses of this population have been made, and all have shown no difference in mortality between HD and PD.

### **Myth 6: PD is not a good option because infections (peritonitis) are more likely to develop**

Frequently, concerns over peritonitis lead to avoidance of PD. Interestingly, patients receiving HD are at an increased risk for bloodstream infection. Furthermore, the mortality of bacteremia and sepsis in the end stage kidney disease (ESKD) population far outweighs that in patients with peritonitis.

### **Myth 7: Certain patients and comorbid conditions are associated with PD failure and discontinuation**

Switching from PD to HD can be disruptive and is associated with a decreased quality of life and higher cost. However, the avoidance of PD because of concerns about failure or discontinuation, based on a particular demographic or comorbid condition, is unfounded. The authors concluded that sociodemographic factors outweighed clinical factors, noting that increased social and financial support would help avoid technique failure.

*Editor's Note: This information is taken from a professional journal and has been edited for content. The full study can be found in <https://www.kidneynews.org/kidney-news/other/peritoneal-dialysis-myth-busters>*



# ESRD Patient News

---

## Nephrologists, patients benefit from accelerating home dialysis education

With the kidney disease community facing a particularly high risk of COVID-19 and of becoming hospitalized, a safe transition from in-center hemodialysis to home dialysis is more critical than ever.

Earlier this year, the CMS Learning System for the Comprehensive ESRD Care model, in partnership with End-Stage Renal Disease Seamless Care Organizations (ESCOs) nationwide, conducted research to identify best practices for encouraging a safe transition to home dialysis modalities.

To supplement the research, CMS also conducted a case study to assess Fresenius Kidney Care's (FKC) home dialysis program.

Fresenius operates 23 of the 36 existing ESCOs across the United States, accounting for 1,000 ESCO dialysis clinics, 1,500 nephrologists and approximately 46,000 patients. As a result of numerous educational and operational initiatives to prioritize home centered dialysis, the company saw a 15% increase in home dialysis adoption (from March 1, 2019 to March 1, 2020) and a 40% increase in the overall home hemodialysis population in 2020.

In evaluating the success FKC had in increasing the adoption of home dialysis, CMS determined targeted home dialysis education programs are the most effective solution for encouraging patients to consider the modality.

The findings also yielded the following four patient-centered strategies to improve home dialysis education, and patient care:

- ◆ identify staff who have trusting relationships with patients on in-center hemodialysis (ICHHD) to serve as home dialysis educators;
- ◆ train staff to discuss the benefits of home dialysis with patients on ICHHD;
- ◆ develop accessible home dialysis learning activities for patients on ICHHD; and
- ◆ target education to patients who are likely to clinically benefit from and also consider an in-center-to-home dialysis transition.

### Educate providers

As the rate of home dialysis adoption increases, multidisciplinary care teams must be staffed, educated and comfortable with home dialysis to meet the increasing demand.

In response to this gap, Fresenius developed a "Home Champion" program, in which physicians who are identified as being supportive and

## Nephrologists, patients benefit from accelerating home dialysis education

knowledgeable about home dialysis are engaged to provide education and outreach to other nephrologists.

These home champions also participate in monthly case-based learning sessions with goals to make providers comfortable with home dialysis; aware of potential complications; and ensure the treatment regimen meets the needs of the patients.

### Educate patients

Patients who were recently diagnosed with ESRD, and identified as candidates for dialysis, must face the reality of a new, frightening diagnosis, and the overwhelming process of a complex, life-sustaining treatment.

To empower patients and instill a sense of control, they must have resources, education, tools and support to make the most informed treatment decision.

Fresenius Kidney Care established more than 100 operating transitional care units around the country. These are separate spaces within a dialysis center offering more intensive education and hands-on training for new dialysis patients or those transitioning between treatment options. Approximately 45% of participating patients chose home dialysis after completing the program.

Fresenius Kidney Care also provide personalized learning through their formal kidney disease and dialysis education classes called KidneyCare:365 and expanding their patient care staffing model to include the role of kidney care advocates.

### Future of home dialysis

Growth in home dialysis adoption predated the COVID-19 pandemic and the pandemic accelerated operations toward implementing the strategies necessary for successful transition to a home-centered mentality. Looking forward, the goal remains the same: to advance knowledge needed to provide home therapy as an option to all patients on dialysis; to educate our clinicians on the basics; and to grow home dialysis as aggressively as possible.

*Edited for content. To read the entire article, visit <https://www.healio.com/news/nephrology/20210204/nephrologists-patients-benefit-from-accelerating-home-dialysis-education>*

# ESRD Patient News

---

## Workshop to Consider New Guidelines for Home Dialysis

With a globally increasing incidence of chronic kidney disease, the need for universal access to cost-effective renal replacement therapy treatment options across the world is needed, particularly in low- and middle-income countries where dialysis treatment options are currently limited and, in many cases, cost prohibitive.

### Options for home

Home dialysis treatment options including peritoneal dialysis (PD) and home hemodialysis (HHD) are associated with increased patient satisfaction and autonomy and, in many cases, improved quality of life. In particular, PD may be delivered at lower costs with less infrastructural requirements compared to center-based hemodialysis.

The global COVID-19 pandemic has underscored and brought to light the need for developing and accelerating home-based care across all areas of medicine. The potential advantages of home-based dialysis care are increasingly important given that home patients are able to minimize health-care facility visits,

reduce dialysis delivery in congregate settings and better adhere to social distancing measures.

Despite the significant benefits of home-based dialysis therapies, use of these therapies remains variable across countries.

### Barriers to home dialysis

From a patient and caregiver perspective, many barriers exist to choosing and performing dialysis at home. Evidence-based strategies for patient and care partner education regarding treatment options are needed including the role of peer to peer education.

Challenges in use of home dialysis need to be addressed in vulnerable and historically underrepresented populations and in areas where socioeconomic and health literacy challenges need to be considered. The degree to which barriers to home dialysis can be overcome may also depend on the presence of assisted home dialysis programs which have been successful across many jurisdictions in addressing physical and cognitive barriers to home dialysis self-care.

## Workshop to Consider New Guidelines for Home Dialysis

Taken together, the controversies conference will support an in-depth exploration of the following four key questions that are fundamental to address rationale for, and strategies to facilitate increased global use of home dialysis:

1. What is the evidence base to support increased use of home dialysis, focusing on clinical and patient-reported outcomes?
2. What are barriers at the facility level that impact home dialysis utilization and how can these be addressed?

3. What are individual-level challenges that individuals and care partners face that impact choice and use of home dialysis therapies?

4. What are the financial and policy considerations that impact global differences in rates of home dialysis utilization?

*Edited for content. To read the entire article, visit [https://kdigo.org/wp-content/uploads/2020/01/KDIGO-Home-Dialysis-Conference-Scope\\_Final-Feb-17.pdf](https://kdigo.org/wp-content/uploads/2020/01/KDIGO-Home-Dialysis-Conference-Scope_Final-Feb-17.pdf)*

## NIH to evaluate COVID-19 at-home testing system

A research team funded by the National Institutes of Health has launched a study to assess performance and usability of a smartphone app paired with the Quidel QuickVue At-Home COVID-19 Test, which received Emergency Use Authorization from the U.S. Food and Drug Administration for use with a prescription. The home test was supported by NIH through the Rapid Acceleration of Diagnostics (RADx) initiative, which spurred the development and commercial availability of millions of COVID-19 tests over the past year.

More than 200 participants have enrolled in the study and will do daily testing for a two-week period. An app called MyDataHelps, developed by CareEvolution, LLC provides step-by-step instructions for taking the test and tools to ensure steps of the test are performed at the correct time intervals. Although users can interpret the test result on their own, the app also provides an independent confirmation of the result when the user submits a picture of the test strip using the camera on their phone.

*Edited for content. For the full article, visit <https://www.nih.gov/news-events/news-releases/nih-evaluate-covid-19-home-testing-syste>*

# ESRD Patient News

## Kidneys from Deceased Acute Kidney Injury (AKI) Donors Found Safe, Effective

Kidney transplant with organs from donors who died after developing AKI showed similar outcomes as transplant with non-AKI organs, according to study results.

“The purpose of this study was to look at long-term outcomes of kidney transplantation from deceased donors with terminal acute kidney injury,” Trent VanHorn, of the department of surgery at Wake Forest Baptist Medical Center in Winston Salem, North Carolina, said at the virtual American Society of Transplant Surgeons Winter Symposium.

The retrospective review included 185 AKI kidneys (147 standard criteria donor kidneys, 26 expanded donor criteria kidneys and 12 kidneys from donors after cardiac death).

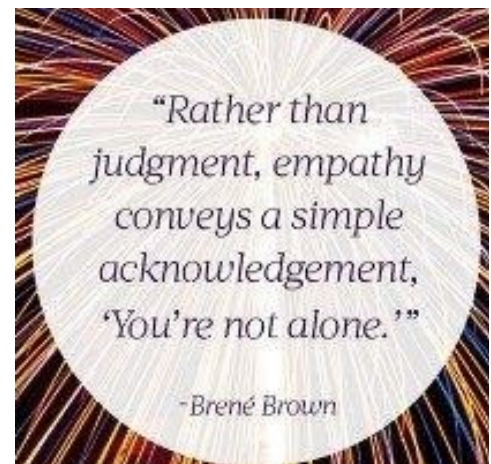
After a mean follow-up of 78 months, researchers found actuarial graft survival was comparable to transplants performed with brain-dead non-AKI standard criteria donor kidneys, with similar patient survival between groups.

While delayed graft function (DGF) occurred in more patients who received AKI kidneys (47% vs. 22%), the impact of DGF was earlier

and more pronounced in non-AKI recipients.

“Despite having a significantly higher incidence of DGF, kidneys from deceased donors with terminal AKI have long-term outcomes that are comparable to non-AKI standard criteria donor kidneys and represent a safe and effective method to expand the donor pool,” VanHorn concluded of the findings.

*Edited for content. For the complete article visit <https://www.healio.com/news/nephrology/20210209/transplanted-kidneys-from-deceased-donors-with-terminal-aki-found-safe-effective>*





## CVC-Related Infections Reduced in Hemodialysis Centers Using COVID-19 Hygiene Procedures

Researchers from Italy observed a “drastic” reduction in central venous catheter-related infections after hygienic procedures were implemented at hemodialysis facilities in response to COVID-19 pandemic.

“Hygienic precautions are a key aspect of dialysis care for infection prevention, but they are not sufficient to completely avoid the occurrence of [central venous catheter] CVC-related infections,” Marco Heidempergher, of the nephrology unit at ASST Fatebenefratelli Sacco in Milan, and colleagues wrote.

“During the COVID-19 pandemic, hygienic precautions for preventing viral transmission have been markedly reinforced.”

Using data from two hemodialysis units affiliated with the University of Milan (a total of 215 patients; 33% used a CVC), Catheter-related infection rates during the “maximum spread” of the pandemic (defined as February to May 2020) were compared with infection rates from those months in the previous year, as well as from 2019 in its entirety.

“Infection rates drastically decreased during the COVID-19 pan-

demia, with just one catheter-related bloodstream infection being recorded,” the researchers wrote. Tjeu saw a 91% reduction in catheter-related bloodstream infections for the study period, and an 83% reduction when they compared rates to the whole of 2019.

Key points in the article include:

- Surgical masks are worn by both the patient and nurse when manipulating the CVC;
- Increase utilization of proper hand hygiene by patients and nurses;
- Patients and nurses were prohibited from snacking during the dialysis session;
- Use of blankets was eliminated;
- Increased sanitization of the treatment area.

Global takeaways from this study include long-term adoption of improved hand hygiene by patients and staff and the improved sanitation of the treatment areas.

*Edited for content. For the complete article, visit <https://www.healio.com/news/nephrology/20210209/covid19-hygienic-procedures-reduce-catheterrelated-infections-at-hemodialysis-centers>*

## Communicate Better while Wearing a Mask

**If your dialysis clinic is in need of hand sanitizer and disposable face masks for their dialysis patients, please have them contact us at [support@esrd-patient-support.org](mailto:support@esrd-patient-support.org).**

The quick global spread of COVID-19 has made wearing a mask an everyday occurrence for all of us. Many have found it more difficult to communicate—both to speak and understand others—while wearing a mask. I had a tendency to mumble, not because I needed to, but because something was covering my face. When I simply spoke normally, using my normal voice, tone and volume, I was able to communicate much better. Here are other tips from the National Institute on Deafness and Other Communication Disorders.

1. Consider a face mask with a clear window. These masks use a clear insert, so a person's mouth and lips are visible, which makes lip-reading easier.
2. Be loud and clear. If the person you're talking to is having trouble understanding you, speak slower and louder than you normally would. Focus on speaking clearly.
3. Be patient. Masks and social distancing decrease the sound and obscure the visual cues that help us communicate. Be compassionate.
4. Turn down background noise which can make conversation hard to understand. If possible, move to a quieter spot.
5. Use another method. If speech is too hard to understand, use another method—text, or paper and pen—to get your message across.
6. Bring a friend or be a friend. If it's essential to understand spoken details with a health care provider or teacher, for example, consider bringing a friend or family member with you to listen and take notes. Offer to accompany a friend to an important appointment or meeting and be their second set of ears.

*Edited for content. For the full article, visit <https://magazine.medlineplus.gov/article/6-ways-to-communicate-better-while-you-wear-a-mask>*