End-stage kidney disease or ESKD (what most people call kidney failure) is a common chronic condition that occurs when the kidneys stop doing their job of removing waste and extra fluid from a person’s body. Another term that means the same thing and is used by Medicare and some health care professionals is end-stage renal disease, or ESRD (renal means “related to kidneys”).

Two treatments are used for kidney failure: dialysis and transplant. Because there is a shortage of transplantable organs, many people are on dialysis while they are waiting. And some people are not good candidates for transplants.

There are two forms of dialysis: hemodialysis and peritoneal dialysis. A health care team will help your family member or friend decide which form is best for him or her. While many people get their treatments at a dialysis center, these therapies can be done at home, with proper preparation and instruction. Make sure you have contact information for everyone on the health care team who serves the person’s dialysis needs. They may be in different locations and work for different agencies.

This video describes an important aspect of hemodialysis—caring for the vascular access site on the body, usually the forearm (vascular refers to a blood vessel, in this case a vein carrying blood). If you are primarily interested in peritoneal dialysis, go to www.aarp.org/nolongeralone for the video and resource guide on that form of treatment.

At the beginning of each hemodialysis treatment, needles are placed in the access site and connected to the plastic tubing that lets blood flow to the dialyzer (filter), where it is cleaned, and then flows back to the body. Only a small amount of blood is out of the person’s body at any time. The dialysis machine pumps the blood through the system and controls the treatment time, temperature, fluid removal, and pressure.

The figure is an illustration of how hemodialysis works and the parts of the equipment. Note the vascular access site, which is the subject of the video. This resource guide summarizes the key points of the video and adds some information on insurance coverage and other resources.

**Regular Care of the Access Site**

As with all hands-on treatments, be sure to wash your hands thoroughly before each treatment or adjustment. It is very important to keep the access site clean. Wash the skin over the access site with soap and water every day, and especially before every treatment. Look for signs of infection such as redness, tenderness, or drainage. Also use your fingers to feel for the pulse or thrill (a sensation like a vibration) that shows that the access is intact. If you cannot feel the pulse in this way, try placing your ear over the access and listen for the bruit (pronounced “broo-ee”), which is a swooshing sound.
If the access site starts to bleed, hold pressure over the site with your fingers. Don’t take time to look for gauze. Don’t use a towel, which could cause more blood loss. Elevate the access arm above the level of the heart, if possible, which will slow the blood flow because it is flowing against gravity. Hold the pressure for at least 10 minutes—consistent pressure to stop the bleeding, no peeking during the hold! If the bleeding has stopped, observe the site for one to two hours to make sure that the bleeding does not start again. If the bleeding does not stop or there is a tear in the access, keep applying pressure and call 911. Fortunately, these emergencies are rare, but it is better to be prepared.

To prevent an emergency, make sure your family member or friend follows these rules:

> DON’T carry heavy items with the access arm.
> DON’T wear tight clothing or jewelry on the access arm.
> DON’T sleep on the access arm.
> DON’T do anything that could injure the access arm.
> DON’T use the vascular access in the arm for anything aside from dialysis.
> DON’T allow blood pressure readings, blood draws, or injections on the access arm.

And some things for you, the family caregiver, to do:

> DO prepare the skin prior to placing the dialysis needles and rotate the needle sites as instructed.
> DO report any signs or symptoms of infection to the home dialysis nurse.
> DO discuss any questions or concerns with your family member or friend’s home dialysis team.

Home hemodialysis is challenging for the family member or friend and the family caregiver. With good instruction and support, it can be managed in a way that allows the family member or friend a good quality of life without the need for continual clinic visits.

**Insurance Coverage for Home Hemodialysis**

End-stage kidney (or renal) disease is the only disease that Medicare covers regardless of age. Medicaid and other insurance plans also cover ESKD. Under Part B, Medicare covers both inpatient and outpatient dialysis, including equipment, most medications, and trained professionals to instruct the patients and caregivers at home, if that is their choice. Part B requires a 20 percent copay after the yearly deductible has been reached. The eligibility rules are somewhat complex, as are the arrangements if the person also has employer-based insurance. The equipment supplier must be a “participating provider” with Medicare, which means that the equipment supplier accepts Medicare rates. See the Additional Resources section for more information.

**Additional Resources**

The Home Dialysis Central website has extensive information for patients and caregivers, including a side-by-side comparison of hemodialysis and peritoneal dialysis. There is a message board for patients, family, and friends. Go to [https://homedialysis.org/home-dialysis-basics/what-is-dialysis](https://homedialysis.org/home-dialysis-basics/what-is-dialysis).

For information on Medicare eligibility and coverage for ESRD, go to [https://www.medicare.gov/coverage/dialysis-services-supplies](https://www.medicare.gov/coverage/dialysis-services-supplies).


There are many other videos and resource guides in this Operating Specialized Medical Equipment series. Go to [www.aarp.org/nolongeralone](http://www.aarp.org/nolongeralone) for a complete listing.

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