



# A Primer on Home Dialysis

Home dialysis has clear advantages for patients with end-stage kidney disease (ESKD). The average ESKD patient receiving in-center dialysis spends between 3-5 hours, 3 times a week dialyzing.<sup>1</sup> ESKD patients are on dialysis for the rest of their lives, or until transplanted. This treatment is lifesaving, but the significant burden it places on patients presents real challenges for individuals and their families, especially those living in rural or underserved areas. **Further, the quality-of-life advantages of home modality are clear—improved survival rates, significantly more flexibility for patients, the potential to experience fewer dialysis side effects, and even increased options for employment, compared to in-center dialysis.**<sup>2</sup>

There are two modalities for home dialysis: Home Hemodialysis (HHD) and Peritoneal dialysis (PD).

- **HHD** is virtually identical to in-center treatment options. Blood is filtered and cleaned externally through a dialyzer, then returned back to the patient's body. HHD requires a care partner, though not necessarily a clinician. Patients have the option to increase the number of sessions and reduce time spent dialyzing at each session.
- **PD** is almost exclusively a home-based treatment option. Instead of using an external artificial filter, the inside lining of the patient's belly, or peritoneum, acts as a natural filter. Dialysate (dialysis fluid) flows through the patient's peritoneum and filters out impurities while the blood stays in the arteries and veins. Extra fluid and waste products filter out of the blood and into the dialysate, then out of the body. PD patients can dialyze while they sleep.

Despite the fact that home dialysis offers significant advantages for individuals with kidney failure, there are several barriers that can limit the adoption of home dialysis:

- Home infrastructure limitations—home dialysis requires proper infrastructure, including clean water, electricity, and space for equipment. Patients also need support and training to set up and operate the necessary equipment. Those facing social determinants of health fight additional barriers.
- Lack of Education and Awareness—many patients and even healthcare providers may not be fully aware of the benefits and options for home dialysis. More education and support are needed for both providers and patients.
- economic limitations deserve special consideration and assistance to begin home dialysis.
- Patient training—learning to perform dialysis at home can be complex and intimidating, and patients may require substantial training to safely manage their treatment. Adequate training and ongoing support are crucial.
- Coverage— ESKD is one of only two conditions that Medicare covers regardless of patient age. However, reimbursement policies and coverage may vary, and not all patients may have access to the same level of financial support for home dialysis.

**The Alliance works in partnership with policy-makers to advance solutions to overcome these barriers -- including increased patient and provider education, improved reimbursement policies, and expanding support networks – and help improve access to dialysis at home for ESKD patients.**

## Fast Facts

Nearly **808,000 Americans have ESKD** and Medicare spends roughly **\$50 billion annually** for persons with ESKD.

Rural patients with prevalent ESKD are more likely to dialyze at home (**16.2%**) compared to their urban counterparts (**13.3%**).

There are there are substantial **racial and ethnic disparities**:

- **Black** people are nearly 4 times more likely to develop ESKD,
- **Hispanic** people and **Native American** people are more than twice as likely to develop ESKD, and
- **Asian** people are nearly 1.5 times more likely to develop ESKD.

In-center dialysis is by far the most common modality, but **home dialysis is modestly growing**: from 2010 to 2020 home dialysis grew from 9.1% to 13.7%.

<sup>1</sup> [Key points: About Dialysis for Kidney Failure](#). National Kidney Foundation.

<sup>2</sup> Walker RC, Howard K, Morton RL. Home hemodialysis: a comprehensive review of patient-centered and economic considerations. Clinicoecon Outcomes Res. 2017 Feb 16;9:149-161. doi: 10.2147/CEOR.S69340. PMID: 28243134; PMCID: PMC5317253.