

# Advancing dialysis

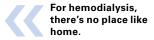
More frequent hemodialysis is associated with improved clinical outcomes among residents requiring dialysis in skilled nursing facilities

or years, thousands of residents requiring dialysis have trekked miles to endure hours of hemodialysis, returning to their skilled nursing facilities at night exhausted and unable to take full advantage of the services their facilities have to offer.

Dialysis, prescribed by nephrologists, removes toxins as well as fluid from the body when the kidneys stop working. More frequent weekly treatments have been associated with improved patient outcomes. Transportation, payment and other issues, however, have limited many nursing home residents to less frequent but longer therapy with more rapid ultrafiltration (fluid removal).

Major fluid fluctuations that accompany a typical three-day-a-week dialysis schedule can put extreme stress on the heart, wearing patients down physically and mentally.

A new study shows more frequent hemodialysis treatments provided in-house could be a game changer for both short term and long term nursing home residents.



The comprehensive review of Medicare claims data shows receiving dialysis roughly 5 times per week lowers the risk of death and cardiovascular hospitalization compared to conventional dialysis in a SNF setting.

Operating at 40 sites in Illinois and Ohio, Affiliated Dialysis Centers (ADC) has moved a large majority of its 400-plus patients to a more frequent treatment regimen that lasts about 3 hours each to meet their individual clinical needs. Most receive hemodialysis in their nursing home, either bedside or in a "dialysis suite."

"We've observed having hemodialysis five times a week is much gentler on the heart," said ADC Chief Clinical Officer Susan Markovich, MBA, RN, CNN. "More frequent on-site hemodialysis helps residents maintain rehabilitation, medication, meal, and activity schedules as residents remain in-house and they experience faster post-dialysis recovery times and have more energy than with conventional (thrice weekly) treatments."

To learn more, visit www.nxstage.com/snf



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About 80% of ADC's patients use home hemodialysis machines provided by NxStage Medical. NxStage conducted the groundbreaking study of ADC's health care claims to better understand the impact of dialysis frequency on residents in a SNF setting.

The review of Medicare data from 2011 to 2015 found that nursing home residents who received hemodialysis 4.5 or more times per week had 34% lower risk of mortality and 23% lower risk of cardiovascular hospitalization, compared to patients who averaged 2.5 to 4.4 sessions weekly.

"The data tells us that frequent hemodialysis can improve outcomes in the young and the old, the relatively healthy and the frail," said study author Dr. Eric Weinhandl, clinical epidemiologist and biostatistician for NxStage. "Patients dialyzing in SNFs are also not traveling back and forth to dialysis facilities."

Among the general population, about 75 percent of those with chronic kidney disease suffer from a heart

complication called left ventricular hypertrophy, and cardiac disease is to blame for 43 percent of deaths that occur annually among hemodialysis and peritoneal dialysis patients.

Weinhandl examined

### **Multiple Benefits**

On-site home hemodialysis doesn't have to be expensive, and the investment could pay off in the form of improved resident satisfaction, more time for other needed healthcare, and more efficient ser-

On-site dialysis also removes the cost and complication of transportation which is particularly challenging during extreme weather conditions.

NxStage's home hemodialysis system requires just tap water, a drain, and a regular electrical outlet and is designed for patient ease of use.

A dialysis suite has no square-footage requirements, but must provide sufficient space for safety and privacy. Many providers install televisions, games or other entertainment for residents to enjoy while they dialyze.

## "Having hemodialysis five times a week is much gentler on the heart."

— Susan Markovich, ADC Chief Clinical Officer

claims for 3,619 patients with an average age of 69. An abstract of the findings were presented at the American Society of Nephrology's annual meeting in October.

With approximately 65,000 dialysis patients residing in skilled nursing facilities annually, the findings of this study reinforce that more nursing homes should consider implementing on-site home hemodialysis with more frequent treatments utilizing the NxStage system.

vices.

"On-site hemodialysis will position SNFs to take advantage of value-based care incentives from CMS's recently announced Patient **Driven Payment Model** (PDPM)," stated Josh Rothenberg, Chief Operating Officer of Dialyze Direct, which recently announced its planned acquisition of ADC. "This ties SNF reimbursements to patient mix with higher reimbursement rates for improved outcomes in medically complex patients."

### **Key Results**

Residents receiving more frequent vs. conventional hemodialysis in a SNF setting experience:

34% lower risk of mortality

23% lower risk of cardiovascular hospitalization

\*based on Medicare claims for 3,619 patients/2011-2015

#### Considerations:

The NxStage system is a prescription device. All forms of hemodialysis, including treatments performed in-center, at a Skilled Nursing Facility, and at home, involve some risks. In addition, there are certain risks unique to treatment in the home environment. Patients differ and not everyone will experience the reported benefits of more frequent home hemodialysis. When vascular access is exposed to more frequent use, infection of the site, and other access related complications may also be potential risks. Talk to your doctor to see if more frequent home hemodialysis with NxStage is right for you. Patients and providers are encouraged to contact their state regulators to discuss state-specific regulations that may impact dialysis in the Skilled Nursing Facility setting.