How to increase home dialysis use

Why do 90% of patients who need dialysis end up getting conventional treatment in dialysis centers—and only 10% end up getting treatment at home?

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Tell someone they have two treatment plans for their heart disease, lung cancer, or diabetes. For years, close to 90% have chosen Treatment A. Treatment B is also available, and has been successful. But few people have selected it, according to the data. You hear some information about it, but the people you consult with seem to have more confidence in Treatment A. And you can start the therapy immediately.

Which one would you chose?

Must likely, you would go with the one that has been chosen by close to 90%. It’s a safe bet.
Home hemodialysis and in-center dialysis have been like this for many years. Both therapies do the same thing: the equipment is similar, the technique is similar, and the desired goal is reached. Peritoneal dialysis, while unique, likewise offers similar outcomes.

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So why then have close to 90% of patients who need dialysis end up getting conventional treatment (3x per week) in dialysis centers—and only 10% end up getting treatment at home? And why has this been consistent—albeit with some nominal growth in the last few years—for nearly three decades? In 1972, before the explosive growth of for-profit, in-center dialysis care, approximately 40% of patients were dialyzing at home. By 1980, that number had shrunk to less than 5%. Why the rapid abandonment of home therapies in eight years’ time?

An added quirk to this equation: in many cases, nephrologists who ultimately prescribe the therapy—and, in one way or another, take responsibility for placing patients in clinics—indicate in surveys that *they themselves* would choose different therapies than what they prescribe for most of their patients. Peritoneal dialysis; short, daily hemodialysis; slow, nocturnal hemodialysis would be their choice. But not conventional, three-times-a-week dialysis.

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The United States lags behind most others in sending dialysis patients home—Australia, Canada, Denmark, Finland, Iceland, Mexico, the Netherlands and New Zealand all have home dialysis rates at or above 20%. Hong Kong has a “PD First” approach, where patients can choose any renal replacement therapy they wish, but the government will only pay for other therapies if peritoneal dialysis is contraindicated.

In a Oct. 11, 2014 article on home dialysis, Modern Healthcare magazine presented the issue succinctly: “Research shows that patients on home hemodialysis or home peritoneal dialysis who dialyze five to six times a week have better health outcomes than those who visit an outpatient center three times a week because home-based patients filter their blood more frequently. But experts say Medicare payment policies, cost issues for providers and patients, patient demographics and physician comfort levels have gotten in the way of broader use.”

No doubt, all those factors play a part in this lopsided picture of prescribing home vs. in-center therapies in the U.S. Does it need fixing?

**GAO looks at obstacles to home dialysis therapy**
Yes, it does, said the Government Accountability Office in a report released last month on the state of home dialysis. And they were fairly blunt in their appraisal: A need to fill excess capacity, brought on by an overbuild of dialysis clinics in the last 25 years, along with better profit margins for in-center patients, has led dialysis providers to de-emphasize home dialysis. Likewise, nephrologists that the agency interviewed believed that they should get paid the same each month for patient care whether a patient is dialyzing at home or in-center. “The growth in facilities’ capacity to provide in-center hemodialysis from 1988 to 2008 outpaced the growth in the dialysis patient population over the same time period,” the GAO noted. “Specifically, the number of dialysis stations...increased at an average annual rate of 7.3% during this time period, while the number of patients increased at an average annual rate of 6.8%.” Recent data shows that the growth in new starts on dialysis is in the 3-5% range.

The need to fill that capacity is coupled with better profit margins because of the efficiency of in-center care, the GAO said. “Although over the long term facilities may have a financial incentive to encourage the use of one or both types of home dialysis, the impact of this incentive could be limited in the short term,” said the GAO. “This is because, in the short term, we found that expanding the provision of in-center hemodialysis at a facility generally tends to increase that facility’s Medicare margin and that the estimated increase is more than would result if the facility instead expanded the provision of either type of home dialysis.”

**Related: It’s time to start adequately funding home hemodialysis training**

So even though federal law now requires that all incident dialysis patients be educated about all modality options, and all those options be made available to them, there are other factors at work that may be blurring a nephrologist’s view of sending a patient home:

- An association with a dialysis provider who wants to fill their overcapacity

- Knowledge that in-center patients generate more revenue for their practice then home patients because of differences in the monthly Medicare Capitated Payment. “Medicare payment policies may constrain physicians’ prescribing of home dialysis,” the GAO asserted. “Specifically, Medicare’s monthly payments to physicians for managing the care of home patients are often lower than for managing in-center patients, even though physician stakeholders generally said that the time required may be similar.” Nephrologists also receive a one-time $500 bonus if they refer a patient to home therapy and the patient completes training.
• A lack of comfort and knowledge about home therapies (how many nephrology fellows visit the home of a patient while they are performing nocturnal dialysis or peritoneal dialysis?)

• A fear that, while they might chose such a therapy for themselves, their patients aren’t capable of handling the rigors of home therapy and may not encourage patients to educate themselves on the different options. The GAO said that less than 2% of eligible Medicare patients received the Kidney Dialysis Education benefit in 2010 and 2011, and “use has declined since then.” Studies have shown that when patients are presented home therapy options alongside the in-center dialysis option, they will select home therapy.

What is the dialysis industry doing?

There are some encouraging signs that industry is become more responsive to improving home therapy, with a focus on simplicity:

• NxStage Medical and Fresenius Medical Care are developing new PD machines. Baxter Health Care just released its new AMIA PD cycler.

• Baxter’s new home hemodialysis machine, VIVIA, is undergoing U.S. trials. The system has been approved for sale in Europe.

• NxStage Medical is working on its next version of SystemOne, the home hemodialysis machine that accounts for most of the HHD patient population in the U.S. And Outset Medical will launch its new compact hemodialysis machine Tablo in the spring of next year.

Getting a home dialysis program started

• Look at those home dialysis programs that have succeeded and see what makes them unique. Pay a visit to the Global Forum for Home Hemodialysis (www.home-hemodialysis.com). It is a new Web-based project funded by Baxter that offers expertise on setting up a HHD program. The site offers downloadable PDFs of articles written by experts on everything from HHD program economics to helping patients understand what modifications are needed in the home for dialysis. “We believed there was an absence of material and information out there on HHD,” said Christopher Chan, MD, a key organizer of the project and a Professor of Medicine and Director of the Division of Nephrology for the University Health Network at the University of Toronto. “…We wanted to develop a recipe, a cookbook for those people
interested in developing an HHD program: how to set up the infrastructure; understand appropriate patient selection, and build the right clinical team.”

- Remove disincentives for nephrologists. Without passing judgment on its potential influence, make the MCP the same for all patients.

- Bring Medicare officials and large dialysis organizations—who control close to 75% of the patient population—together to map out more incentives to send patients home.

- Make sure patients are getting predialysis education—the Kidney Disease Education benefit—that could help them learn about home dialysis. Remove the barriers as to who can provide it.

- The nephrology specialty needs to right its own ship and make sure the knowledge base on home therapies is solid—for veterans and for residents interested in nephrology. If I believe home therapy is my best option, I want a nephrologist who supports my enthusiasm.

Home or more intensive dialysis appears to be the choice of most physicians. Let’s make sure it is shared with patients, too.