

## Using the MATCH-D to Document the CMS Requirement to Offer All Modalities

*Dori Schatell, MS, and Beth Witten MSW, ACSW, LSCSW*

The CMS Conditions for Coverage for dialysis facilities that took effect on October 15, 2008, require that patients:

*Be informed of all treatment modalities and settings, including but not limited to, transplantation, home dialysis modalities (home HD, IPD, CAPD, CCPD), and in-facility HD. The patient has the right to receive resource information for dialysis modalities not offered by the facility, including information about alternative scheduling options for working patients.*

The Method to Assess Treatment Choices for Home Dialysis (MATCH-D) can help you and your interdisciplinary team with the process of assessing patients for home modalities and documenting this in the plan of care for the patient record.

The MATCH-D was developed by a multidisciplinary and international group of home dialysis experts. It is a free downloadable tool available from the Home Dialysis Central website: [www.homedialysis.org/match-d](http://www.homedialysis.org/match-d).

The five-page tool includes how and why the MATCH-D was developed, brief user instructions, a list of tool reviewers, one page with suitability criteria for self-peritoneal dialysis, one page for self-home hemodialysis, and a notes page for each. Suitability criteria are divided into three categories: “strongly encourage” (green column with green header for GO), “encourage after assessing and eliminating barriers,” (green column with yellow header for CAUTION) and, finally, “may not be able to do (or will require a helper)” (red column with red header for STOP). Each criterion has a check box next to it for documentation purposes.

### ***Educating About All Modalities***

CMS added the requirement to inform patients about all modalities *and where to get them* explicitly to encourage increased use of home modalities. Currently, the eight treatment choices include:

- Transplant (living or deceased donor)
- Peritoneal dialysis (PD—manual or using a cyclor machine at night)
- Standard in-center hemodialysis (HD—3–4 hours, 3 days a week)
- Nocturnal in-center hemodialysis (8 hours, 3 nights a week)
- Nocturnal home hemodialysis (8 hours, 3–6 nights a week)
- Short daily home hemodialysis (2–3 hours, 5–6 days a week)
- Standard home hemodialysis (4–5 hours, 3–4 days a week)
- No treatment

Of these, the most recent *United States Renal Data System Annual Data Report* (2009) reveals that of 527,283 people with ESRD, 158,739 (30.1%) had a functioning transplant. Among the 368,544 people doing some form of dialysis, 338,109—**91.7%**—were doing standard in-center HD. Given that eight different studies from around the world have consistently found that when patients receive education about their dialysis options, 45–60% will choose a home treatment, (Schreiber et al., 2000; Groovaerts, Jadoul, & Goffin, 2005; Mehrotra, Marsh, Vonesh, Peters, & Nissenson, 2005; Prichard, 1996; Marron et al. Spanish Group for CKD, 2006; Wuerth, 2002; Gomez, Valido, Celadilla, Bernaldo de Quieros, & Mojon, 1999; Manns et al., 2005) this badly-skewed U.S. distribution is akin to 92% of cancer patients using only radiation (not surgery or chemotherapy) and clearly demonstrates a failure to properly educate this chronic disease population. In fact, this 45–60% figure should serve as a benchmark for our own modality education efforts.

Given the profound impact of an ESRD modality on the patient’s lifestyle, it is vital that the renal community move beyond the “default” setting of standard in-center HD for all. Transplant is, of course, 100% portable kidney replacement, with the potential downsides of surgery, non-function or failure, and devastating potential side effects from the immunosuppressant medications, such as diabetes or cancer. Survival with a transplant is typically reported to be far superior to standard HD—with triple or more life expectancy.

Compared to standard in-center HD, PD offers near-continuous renal replacement. This allows patients to avoid the “ups and downs” of thrice-weekly fluid removal, protects the heart, and nearly eliminates the unpleasant (and hazardous) symptoms of hypotension, such as painful muscle cramps, vomiting, headaches, etc. At the same time, PD allows far more schedule control, easier travel, and a more normal diet and fluid intake than standard HD, with fewer medications. Downsides include the need for a catheter in the abdomen or chest (presternal PD catheter), associated body image concerns, potential weight gain, and the need to store a month’s worth of bulky supplies. While most studies show about equivalent survival between standard HD and PD, a recent abstract presented at the 2010 National Kidney Foundation Spring Clinical Meetings in Orlando, FL, reported “consistent survival superiority” for PD—even among patients who also had diabetes (Hechter et al., 2010).

Nocturnal HD offers patients 2 (if done 3 nights a week) to 4 (if done 6 nights a week) times as much renal replacement therapy as standard HD, while taking minimal time out of the day. In contrast to harsh, rapid, standard treatments, nocturnal HD is very slow and gentle, and does a far more effective job of removing fluid and cleaning the blood, which protects the heart in the short-term, and may protect the nerves, bones, and joints in the long-term. Most people who begin nocturnal treatment are able to stop taking blood pressure medications and phosphate binders—home nocturnal HD patients may even need phosphate *supplements*. They can eat a normal diet and drink normal amounts of fluid, with few limits. They report more energy (Bugeja et al., 2009), better sleep (Beecroft et al., 2009), and better sexual function, though this has not yet been formally studied. Studies have found that survival on nocturnal HD is about equivalent to that of deceased donor transplant—about triple what would be expected of the same patients on standard HD (Pauly et al., 2009; Johansen et al., 2009). Downsides include the challenge of sleeping while blood is outside the body (bedwetting alarms can help alleviate the fear of bleeding incidents), the need for a partner if the clinic requires one, or perhaps the inconvenient schedule of in-center nocturnal HD, typically about 9 p.m. to about 5 a.m.

Short daily HD treatments may be easier to fit into busy lives. It has also been associated with survival that approximates deceased donor transplant (Kjellstrand et al., 2008). A portable machine that weighs 75 lbs and can be put in the trunk of a car or taken on an airplane can make travel easier (nocturnal treatments may also use the smaller NxStage machine). Downsides include the need for a partner if your clinic requires one, and time taken out of the day for set-up, treatments, and cleanup.

Standard home HD would seem to have all of the disadvantages of standard in-center HD *and* home HD. However, one well-done study found that the survival of conventional home HD patients vastly exceeded that of standard in-center patients matched for age, comorbidities, hypertension, smoking habits, and vascular disease: 5, 10, and 20-year survival rates were 93%, 72%, and 34% with standard home HD—vs. 64%, 48%, and 23% with standard treatments (Saner, Nitsch, Descoedres, Frey, & Uehlinger, 2005).

If standard in-center HD was a superior treatment, it would be less essential for us to educate patients about all of their options. However, it is arguably the *least* effective treatment option for patient survival, the one with the most barriers to work, and it comes at the *greatest* possible cost. Therefore, it is in the best interests of patients, providers, and payers to encourage increased use of transplant and the various home therapies.

### ***Using the MATCH-D in Patient Assessment and the Patient Plan of Care***

Use the MATCH-D as a guide for the interdisciplinary team to review the chart and talk with the patient to identify factors that may help predict likely home success or alert them to challenges that need to be addressed.

First, look to the green column with the green heading. Point out lifestyle advantages of home therapies that seem to be a good fit for a patient's desires. Many patients fear the unknown (home dialysis) and feel secure in the clinic with staff on hand. A "neutral" presentation of options will not help patients understand how their day-to-day lives can be improved with longer, more frequent, or more continuously delivered therapy. This is likely the reason that many programs are not reaching the 45–60% home treatment choice rate found in studies. Focus patient education on *lifestyle* considerations that are priorities for your individual patients: work, travel, caring for loved ones, fear of needles, a love of good food, sexuality and fertility, regaining a sense of personal control, etc. The most important factor in any patient's choice of a home therapy is motivation. A patient who *wants* to succeed will overcome barriers and find a way.

Next, address any barriers identified in the second column. Assist devices for the blind, visual alarms for the hearing impaired, low-literacy training materials, and other solutions are suggested for both PD and home HD. Your interdisciplinary team may be able to identify additional solutions for individual patient challenges. If a patient truly wants to go home, it is rewarding for the entire team to help make that happen.

Finally, end with the red column. Some patients may not be able to independently perform any type of home therapy. In this case, think "outside the box." In our experience answering phone calls and e-mails from the Home Dialysis Central website ([www.homedialysis.org](http://www.homedialysis.org)), we find that there are two main groups of people who do home dialysis:

1. Relatively healthy, mobile, independent sorts who want to work or travel.
2. Frail or morbidly obese patients with multiple comorbidities whose families prefer to care for them at home rather than transport them to and from a center three times a week. This includes patients who require ventilator support or have tracheotomies who may be refused admittance to dialysis clinics, but whose families would be willing to learn home dialysis if training can be offered in the home (as allowed by CMS). Or, families may hire a trained helper to treat their loved one at home if the resources are available.

Some of the patients in this latter group may well do better at home than in a center getting standard treatments, if psychosocial support is available. The red column will serve to rule patients out as independent home candidates or as home candidates at all if other supportive factors are not in place and cannot be arranged.

Use the check boxes in each column and the notes pages to document your findings and your discussions with the patient. Sign and date the document and have the patient (or a family member if the patient is unable) sign as well. Keep this document in the patient's chart. CMS surveyors will recognize your educational efforts when you have proof that a conversation occurred. Once is not enough, though; adults require repetition to learn. If a patient's circumstances change and his or her current modality is no longer a good fit, it's time to revisit the treatment options choices, provide education, and repeat the MATCH-D discussion.

### ***Using the MATCH-D for Quality Assessment and Performance Improvement (QAPI)***

If an analysis of modality choices at your clinic post-education is much lower than 45–60%, you may want to bring this disparity to the attention of your QAPI program. This should promote a team discussion of root cause analysis, including such topics as what education is provided, how education is provided, how patient understanding is assessed during and after education, and even whether there is an unidentified bias toward standard in-center hemodialysis among physicians, clinic personnel, or patients. Based on the results of this analysis, the interdisciplinary team can brainstorm ways to improve education for patients and promote home dialysis for patients who are good candidates.

### **CONCLUSION**

The Medicare ESRD program was established on the promise that if funds were allocated to make dialysis available to those who needed it, those with kidney failure could be rehabilitated to self-sufficiency. To date, the ESRD program has failed to live up to that promise. Today, the renal community can provide more opportunities to those needing dialysis by providing fact-based education about *all* options for treatment, including their relative impact on lifestyle and survival. The MATCH-D is a user-friendly tool designed to help dialysis clinic staff dispel their own and their patients' commonly held myths, to identify patients for home dialysis who may not have been considered or considered themselves candidates before, and to document this discussion and planning. Considering patients for home dialysis first could benefit our patients, our clinics, and society.

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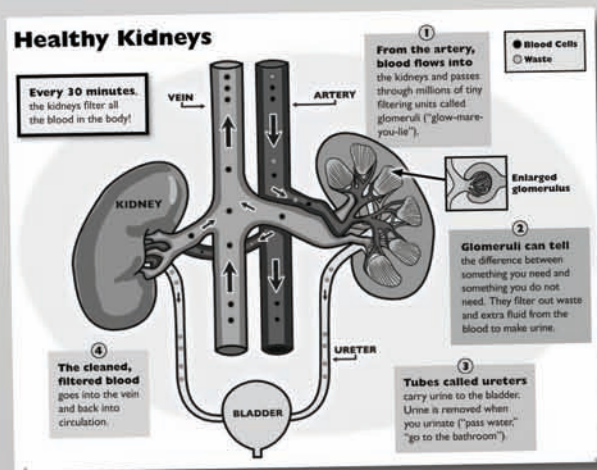
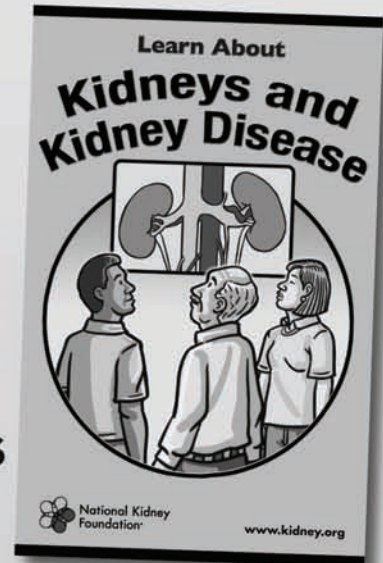
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