

Method to Assess Treatment Choices for Home Dialysis (MATCH-D)

www.homedialysis.org/match-d

Background

The non-profit Medical Education Institute, Inc., developed the **MATCH-D** for Home Dialysis Central (www.homedialysis.org) to help nephrologists and dialysis staff identify and assess candidates for home dialysis therapies (PD and HHD).

Home treatments are under-used in the U.S., and most patients are not told about home options. Yet, the choice of modality affects every aspect of day-to-day life—what to eat and drink, how many drugs will be needed, and whether patients will be able to keep a job with a health plan or care for a loved one. Patients need and deserve to learn about all of their options.

Patients may change from one modality to another over time as their lifestyles or circumstances change. This is not a failure; it's an integrated care approach.

We urge you to refer all patients for transplant evaluation, and encourage patients to do PD or HHD; home dialysis offers optimal care and can be done safely. Only after all home options are exhausted should patients be referred for in-center HD.



How to Use the MATCH-D

The **MATCH-D** tool was designed to sensitize clinicians to key issues about who can use home dialysis. **Column 1** creates triage criteria for patients who should be home. **Column 2** suggests solutions to common home dialysis barriers. **Column 3** presents contraindications for independent home treatment—though these patients may be able to go home with a very involved partner.

We do not recommend using a point system with the MATCH-D. Instead:

1. Go through each column and note factors that suggest good candidates or could be addressed to permit patients to do PD or HHD.
2. Discuss your findings with the patient and family. Research shows that a patient-led modality choice predicts significantly longer survival and a better chance of transplant than a team-led or even a joint decision.

PLEASE NOTE: Patients who have barriers to *self home dialysis* (PD or HHD) may still be able to successfully do home dialysis with a helper who is willing to take on primary responsibility for care.

MATCH-D Tool Reviewers

We would like to thank these home dialysis thought-leaders from around the world who provided their expert input:

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Suitability Criteria for *Self* Peritoneal Dialysis: CAPD, APD

| Strongly Encourage PD |
|---|
| <input type="checkbox"/> Any patient who <i>wants</i> to do PD or has no barriers to it |
| <input type="checkbox"/> Employed full- or part-time |
| <input type="checkbox"/> Student – grade school to grad school |
| <input type="checkbox"/> Caregiver for child, elder, or person with disability |
| <input type="checkbox"/> New to dialysis or has had transplant rejection |
| <input type="checkbox"/> Lives far from clinic and/or has unreliable transportation |
| <input type="checkbox"/> Needs/wants to travel for work or enjoyment |
| <input type="checkbox"/> Has needle fear or no remaining HD access sites |
| <input type="checkbox"/> BP not controlled with drugs |
| <input type="checkbox"/> Can't or won't limit fluids or follow in-center HD diet |
| <input type="checkbox"/> No (required) partner for HHD |
| <input type="checkbox"/> Values flexibility and control of own treatment |

| Encourage PD After Assessing & Eliminating Barriers |
|---|
| <input type="checkbox"/> Unemployed, low income, no HS diploma – <i>not barriers to PD</i> |
| <input type="checkbox"/> Simple abdominal surgeries (e.g. appendectomy, hernia repair, kidney transplant) – <i>not barriers to PD</i> |
| <input type="checkbox"/> Has pet(s)/houseplants (carry bacteria) – bar from room at least during PD connections |
| <input type="checkbox"/> Hernia risk or recurrence <i>after</i> mesh repair – use low daytime volume or dry days on cyclor |
| <input type="checkbox"/> Blind, has no use of one hand, or neuropathy in both hands – train with assist device(s) as needed |
| <input type="checkbox"/> Frail or can't walk/stand – assess lifting, offer PT, offer CAPD, use 3L instead of larger bags for cyclor* |
| <input type="checkbox"/> Unable to speak or read local language – use pictures, videos, culturally-specific training tools, interpreters, and demonstrations |
| <input type="checkbox"/> Resident of a nursing home – train staff to provide dialysis |
| <input type="checkbox"/> Hearing impaired – use light/vibration for alarms |
| <input type="checkbox"/> Depressed, angry, or disruptive – increased personal control with PD may be helpful |
| <input type="checkbox"/> Unkempt – provide hygiene education; assess results |
| <input type="checkbox"/> Anuric with BSA >2 sqm – assess PD adequacy†‡ |
| <input type="checkbox"/> Swimmer – ostomy dressings, chlorinated pool, ocean |
| <input type="checkbox"/> Limited supply space – visit home, 2x/mo. delivery |
| <input type="checkbox"/> Large polycystic kidneys or back pain – use low daytime volume or dry days on cyclor†‡ |
| <input type="checkbox"/> Obese – consider presternal PD catheter |
| <input type="checkbox"/> RX drugs impair function – consider drug change |

| May Not Be Able to Do PD (or will Require a Helper) |
|--|
| <input type="checkbox"/> Homeless – refer to social services and reassess when rehoused |
| <input type="checkbox"/> Can't maintain personal hygiene even after education |
| <input type="checkbox"/> Home is unclean/health hazard; patient/family won't correct |
| <input type="checkbox"/> No/unreliable electricity for CCPD; unable to do CAPD |
| <input type="checkbox"/> Multiple or complex abdominal surgeries; negative physician evaluation.†‡ |
| <input type="checkbox"/> Brain damage, dementia, or poor short-term memory* |
| <input type="checkbox"/> Reduced awareness/ability to report body symptoms |
| <input type="checkbox"/> Malnutrition after PD trial leads to peritonitis†‡ |
| <input type="checkbox"/> Uncontrolled anxiety/psychosis* |
| <input type="checkbox"/> Has colostomy; consider presternal PD catheter |

Check all the boxes that apply.
Keep a copy of the MATCH-D in patient record.



* May be able to do with a helper
† Consider nocturnal HHD
‡ Consider daily HHD

Method to Assess Treatment Choices for Home Dialysis (MATCH-D)

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Suitability Criteria for *Self* Home Hemodialysis: Conventional, Daily, Nocturnal

| Strongly Encourage Home HD (HHD) |
|---|
| <input type="checkbox"/> Any patient who <i>wants</i> to do HHD or has no barriers to it |
| <input type="checkbox"/> Employed full- or part-time |
| <input type="checkbox"/> Drives a car – skill set is very similar to learning HHD |
| <input type="checkbox"/> Caregiver for a child, elder, or person with disability |
| <input type="checkbox"/> Lives far from clinic and/or has unreliable transportation |
| <input type="checkbox"/> Student – grade school to grad school |
| <input type="checkbox"/> Wants a flexible schedule for any reason |
| <input type="checkbox"/> Has rejected a transplant |
| <input type="checkbox"/> Has neuropathy, amyloidosis, LVH, uncontrollable BP†‡ |
| <input type="checkbox"/> Obese/large; conventional HD or PD are not adequate †‡ |
| <input type="checkbox"/> Prefers a liberal diet and fluids, and/or unlikely to follow conventional HD diet and fluid limits†‡ |
| <input type="checkbox"/> Is pregnant or wants to be †‡ |
| <input type="checkbox"/> Frail/elderly with involved, caring helper who wants HHD* |
| <input type="checkbox"/> Values flexibility and control of own treatment |
| <input type="checkbox"/> No longer able to do PD |
| <input type="checkbox"/> Would like to maximize health outcomes |

| Encourage HHD After Assessing & Eliminating Barriers |
|--|
| <input type="checkbox"/> Not eligible for funded home dialysis – consider whether can pay for own dialysis |
| <input type="checkbox"/> Unkempt – provide hygiene education; assess results |
| <input type="checkbox"/> Has pet(s)/houseplants (carry bacteria) – bar from room at least while cannulating/connecting access |
| <input type="checkbox"/> Frail or can't walk/stand – assess lifting ability, offer PT* |
| <input type="checkbox"/> Illiterate – use pictures to train, return demonstrations to verify learning, tape recorders for patient reports |
| <input type="checkbox"/> Hearing impaired – use light/vibration for alarms |
| <input type="checkbox"/> Depressed, angry, or disruptive – increased control with HHD may help |
| <input type="checkbox"/> No support person available – put in communication safeguards to minimize risks |
| <input type="checkbox"/> Rents – check with landlord if home changes needed |
| <input type="checkbox"/> Can't/won't self-cannulate – use patient mentor, practice arm, local anesthetic cream, desensitization* |
| <input type="checkbox"/> No running water, poor water quality, low water pressure – assess machine & water treatment options |
| <input type="checkbox"/> Limited space for supplies – visit home, 2x/mo delivery, consider machine with fewer supply needs |
| <input type="checkbox"/> Drug or alcohol abuse – consider HHD after rehab |
| <input type="checkbox"/> Bedridden and/or has tracheostomy/ventilator – assess self-care and helper ability* |
| <input type="checkbox"/> Rx drugs impair function – consider drug change |
| <input type="checkbox"/> Needs/wants to travel for work or enjoyment – consider use of new HHD technologies |

| May Not Be Able to Do HHD (or Helper Must Do More) |
|---|
| <input type="checkbox"/> Homeless; refer to social services, consider self-care center or community model |
| <input type="checkbox"/> Can't maintain personal hygiene |
| <input type="checkbox"/> Home is health hazard, will not correct |
| <input type="checkbox"/> No or unreliable electricity |
| <input type="checkbox"/> Brain damage, dementia, or poor short-term memory* |
| <input type="checkbox"/> No use of either hand* |
| <input type="checkbox"/> Uncontrolled psychosis or anxiety* |
| <input type="checkbox"/> Blind or severely visually impaired – consider PD* |
| <input type="checkbox"/> Uncontrolled seizure disorder* |
| <input type="checkbox"/> No remaining HD access sites – consider PD |
| <input type="checkbox"/> Reduced awareness/ability to report bodily symptoms |
| <input type="checkbox"/> Has living donor, transplant is imminent – consider PD |

Check all the boxes that apply.
Keep a copy of the MATCH-D in patient record.



* May be able to do with a helper
† Consider nocturnal HHD
‡ Consider daily HHD

