

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

[www.homedialysis.org/match-d](http://www.homedialysis.org/match-d)

## Background

The non-profit Medical Education Institute, Inc., developed the **MATCH-D** for the Home Dialysis Central website ([www.homedialysis.org](http://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:

- ❖ John Agar, MD
- ❖ John Beres, BSN, RN, CNN
- ❖ Christopher R. Blagg, MD, FRCP
- ❖ Debbie Brouwer, RN, CNN
- ❖ Mary Beth Callahan, MSW, ACSW/LCSW
- ❖ Shelly Curtis, RN
- ❖ Kay Deck, BS, RN
- ❖ Pete DeComo, MS
- ❖ José Diaz-Buxo, MD
- ❖ Linda Dickenson, BSN, RN, CNN, CPHQ
- ❖ Barb Ellerston, RN
- ❖ Lori Fedje, RD, LD
- ❖ Joan Frenchko, RN, CNN
- ❖ Susan Hansen, RN, CNN, CHT
- ❖ Nasser Hebah, MD
- ❖ Todd Ing, MD
- ❖ Carl Kjellstrand, MD, PhD
- ❖ Allen Nissenson, MD
- ❖ Karen Ohlhauser, RN
- ❖ Judy Olson, RN, CNN
- ❖ Beth Piraino, MD
- ❖ Ann Robar, BSN, RN, CNN
- ❖ Kris Sizemore, RN
- ❖ Gail Scott, RN, BSN, CNN
- ❖ Karen Schardin, BS, RN, CNN
- ❖ Karen Strott, BSN, RN, CPHQ
- ❖ Jim Sweeney, MBA
- ❖ Paula Tejchman, PCT
- ❖ Cat Thompson, RN
- ❖ Zbylut Twardowski, MD, PhD
- ❖ Amy Williams, MD
- ❖ Bessie Young, MD, MPH

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

www.homedialysis.org/match-d

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

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

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

May Not Be Able to Do PD (or will Require a Helper)
Homeless and no supply storage available
Can't maintain personal hygiene even after education
Home is unclean/health hazard; patient/family won't correct
No/unreliable electricity for CCPD; unable to do CAPD
Multiple or complex abdominal surgeries; negative physician evaluation.†‡
Brain damage, dementia, or poor short-term memory*
Reduced awareness/ability to report body symptoms
Malnutrition after PD trial leads to peritonitis†‡
Uncontrolled anxiety/psychosis*



\* May be able to do with a helper

† Consider nocturnal HHD

‡ Consider daily HHD

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

[www.homedialysis.org/match-d](http://www.homedialysis.org/match-d)

## Background

The non-profit Medical Education Institute, Inc., developed the **MATCH-D** for the Home Dialysis Central website ([www.homedialysis.org](http://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:

- ❖ John Agar, MD
- ❖ John Beres, BSN, RN, CNN
- ❖ Christopher R. Blagg, MD, FRCP
- ❖ Debbie Brouwer, RN, CNN
- ❖ Mary Beth Callahan, MSW, ACSW/LCSW
- ❖ Shelly Curtis, RN
- ❖ Kay Deck, BS, RN
- ❖ Pete DeComo, MS
- ❖ José Diaz-Buxo, MD
- ❖ Linda Dickenson, BSN, RN, CNN, CPHQ
- ❖ Barb Ellerston, RN
- ❖ Lori Fedje, RD, LD
- ❖ Joan Frenchko, RN, CNN
- ❖ Susan Hansen, RN, CNN, CHT
- ❖ Nasser Hebah, MD
- ❖ Todd Ing, MD
- ❖ Carl Kjellstrand, MD, PhD
- ❖ Allen Nissenson, MD
- ❖ Karen Ohlhauser, RN
- ❖ Judy Olson, RN, CNN
- ❖ Beth Piraino, MD
- ❖ Ann Robar, BSN, RN, CNN
- ❖ Kris Sizemore, RN
- ❖ Gail Scott, RN, BSN, CNN
- ❖ Karen Schardin, BS, RN, CNN
- ❖ Karen Strott, BSN, RN, CPHQ
- ❖ Jim Sweeney, MBA
- ❖ Paula Tejchman, PCT
- ❖ Cat Thompson, RN
- ❖ Zbylut Twardowski, MD, PhD
- ❖ Amy Williams, MD
- ❖ Bessie Young, MD, MPH

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

www.homedialysis.org/match-d

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

Strongly Encourage Home HD (HHD)	Encourage HHD After Assessing & Eliminating Barriers	May Not Be Able to Do HHD (or Helper Must Do More)
Any patient who <i>wants</i> to do HHD <i>or</i> has no barriers to it	<b>No employer insurance</b> – not a barrier to nocturnal 3x/week HHD, which Medicare & Medicaid cover	Homeless; consider PD if storage is available
Employed full- or part-time	<b>Unkempt</b> – provide hygiene education; assess results	Can't maintain personal hygiene
Drives a car – skill set is very similar to learning HHD	<b>Has pet(s)/houseplants</b> (carry bacteria) – bar from room at least while cannulating/connecting access	Home is health hazard, will not correct
Caregiver for a child, elder, or person with disability	<b>Frail or can't walk/stand</b> – assess lifting ability, offer PT*	No or unreliable electricity
Lives far from clinic and/or has unreliable transportation	<b>Illiterate</b> – use pictures to train, return demonstrations to verify learning, tape recorders for patient reports	Brain damage, dementia, or poor short-term memory*
Student – grade school to grad school	<b>Hearing impaired</b> – use light/vibration for alarms	No use of either hand*
Needs/wants to travel for work or enjoyment	<b>Depressed, angry, or disruptive</b> – increased control with HHD may help	Uncontrolled psychosis or anxiety*
Wants a flexible schedule for any reason	<b>No helper &amp; clinic requires one</b> – reconsider policy, monitor remotely, use LifeLine device to call for help	Blind or severely visually impaired – consider PD*
Has rejected a transplant	<b>Rents</b> – check with landlord if home changes needed	Uncontrolled seizure disorder*
Has neuropathy, amyloidosis, LVH, uncontrollable BP†‡	<b>Can't/won't self-cannulate</b> – use patient mentor, practice arm, local anesthetic cream, desensitization*	No remaining HD access sites – consider PD
Obese/large; conventional HD or PD are not adequate †‡	<b>No running water, poor water quality, low water pressure</b> – assess machine & water treatment options	Reduced awareness/ability to report bodily symptoms
Can't/won't follow in-center HD diet & fluid limits†‡	<b>Limited space for supplies</b> – visit home, 2x/mo delivery, consider machine with fewer supply needs	Has living donor, transplant is imminent – consider PD
Is pregnant or wants to be †‡	<b>Drug or alcohol abuse</b> – consider HHD after rehab	
Frail/elderly with involved, caring helper who wants HHD*	<b>Bedridden and/or has tracheostomy/ventilator</b> – assess self-care and helper ability*	
Wants control; unhappy in-center	<b>Rx drugs impair function</b> – consider drug change	
No longer able to do PD		



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