



Abbreviated Use Cases

Use Case 1: Stephen			
	<p>Stephen is a 35-year-old who has been on hemodialysis (HD) for 4 years and wants to be listed for transplant. He is frustrated because he was recently declined by a local center due to history of treatment non-adherence. He is eager to return to work and regain what he considers to be “lost time” from his life. He also wants to be more independent, but lacks personal transportation due to his recent divorce where his partner took their shared vehicle. He admits to a depressed mood, but is not interested in therapy or medication. He is willing to consider alternative approaches, but is not sure what they might be. He enjoys playing pick-up basketball at the local YMCA. He hopes to start playing tennis since his new apartment complex has courts, but he needs a partner.</p>		
Patient Priority	Barriers/Facilitators	Action Items	Follow-up
1. Get a transplant	Barrier: declined at local transplant center	Encourage adherence to HD treatment and other appointments. MD to refer to 2 nd transplant center. SW to assist with appointment scheduling and reminders. [V554- transplant]	Missed first new center transplant appointment. Assist with rescheduling and remind him of adherence importance-linking it to his desire for transplant.
2. Become more independent	Barrier: no consistent transportation	SW to check into local transportation options (buses, ride/bike-share) and payment subsidies. [V552- psychosocial status]	Buses are reliable for running errands, but ride-shares are too expensive due to number of appointments on off-days.
3. Manage symptoms of depression	Facilitator: open to discussing symptoms and experiences with social worker (SW) due to existing rapport	MD and SW to review depression screener. SW to discuss social support opportunities (tennis clubs, community groups) with patient within 1 week of meeting. [V552- psychosocial status]	Has consistent group to play weekly pick-up basketball and 2 interested in tennis. He is feeling better understood by the care team and is now willing to try medication for ongoing depressive symptoms.
<p>NOTE: Discuss remaining Conditions of Coverage requirements as needed</p>			

Abbreviations: SW, social worker; MD, medical provider.



Use Case 2: Raymond



Raymond is a 48-year-old who initially had HD-dependent acute kidney injury, but was declared to have end-stage kidney disease 2 months ago. He is having difficulty coming to grips with his new “end-stage” diagnosis and feels hopeless. He struggles with social isolation and anxiety during treatments – frequently signing off early. His last Kt/V was below target. Upon probing, the care team identifies that Raymond often cramps toward the end of his treatments. He has never mentioned this before. Just the thought of cramping makes him anxious, leading him to sign-off treatment early. He is neither engaged nor activated in his care (self-proclaimed), in part, because he feels helpless. He connects with some of the patient care technicians (PCTs) and nurses (RNs) who share his love of video games and sci-fi movies, but wants more interaction with his other care team members as he is coming to terms with being on HD longer-term.

Patient Priority	Barriers/Facilitators	Action Items	Follow-up
1. More interaction and stronger relationships with care team	Barrier: frequent early sign-off and social isolation	SW (as requested by patient) to perform weekly check-ins near the end of treatment to encourage adherence and build rapport. [V552- psychosocial status]	Proudly reports improvement in adherence and enjoys having SW as a point person for the care team. Requests another private care plan meeting with entire team. Schedule meeting.
2. Reduce cramping	Barriers: high interdialytic weight gains and associated high ultrafiltration rates that have worsened since his urine output has dropped off	RD to educate about salt restriction to help reduce his weight gains. [V545- nutritional status] [V544- dialysis dose]	Unable to reduce salt intake despite individualized coaching. Agreed to 4-week trial of extending his treatments by 20 minutes. Cramping improved, and he opted to continue with longer treatment time. Kt/V now at goal.
3. Manage intradialytic anxiety	Barriers: not reporting intradialytic cramping due to feelings of disconnection from the care team, worsening his anxiety	Encourage patient communication with PCTs and RNs about symptoms. RN to continue to monitor cramps. [V552- psychosocial status]	Communicates more openly with PCTs and RNs about symptoms, making him feel more connected and understood by his care team. Anxiety improved with cramping alleviation.

NOTE: Discuss remaining Conditions of Coverage requirements as needed

Abbreviations: SW, social worker; MD, medical provider.



Detailed Use Case

Use Case 3: Gloria	
Pre person-centered care planning state	
<p>Description</p> 	<p>Gloria is a 71-year-old woman with type 1 diabetes (hemoglobin A1c=8), heart failure and osteoarthritis and has been on HD for 3 years. She drives but has difficulty with stairs and prolonged standing. She takes carvedilol, lisinopril, glargine, aspart, sertraline, omeprazole, sevelamer, acetaminophen, and renal vitamin at home and receives mircera, calcitriol, and oral nutritional supplement at dialysis. Her anemia and blood pressure/fluid parameters are all at goal. Her Kt/V is 1.6 and albumin 3.8 g/dL. She is opposed to transplant for religious reasons. Gloria was on peritoneal dialysis (PD) for 3 years but transitioned to in-center HD after membrane failure. She is widowed and does not want to try home HD alone. She has an advanced directive. She enjoys watching television, reading, and gardening. Her daughter Sydney lives nearby and attends most of Gloria’s medical appointments, but has not met her dialysis care team. Sydney has 2-year-old twin daughters; Gloria prefers her family not see her at dialysis.</p> <p><i>Dialysis: MWF 1st shift, 4 hours, target weight 75 kg, 2 kg weight gains, pre-HD BP 145 mmHg, no intradialytic hypotension</i></p> <p>Gloria is due for her annual care plan in 4 weeks. Most care team members are aware of the above information, but the nephrologist is unaware of the activities she enjoys. In general, Gloria is considered a “good” patient (labs near goal and HD-adherent). Gloria’s past care plans were completed quickly at chairside with no new problems identified and no treatment changes made.</p>
<p>Pre-conditions</p> <p>1) <i>Post-dialysis fatigue limits her ability to spend time with grandchildren, a significant source of joy</i></p> <p>2) <i>Arthritic knee pain prevents her from gardening</i></p>	<p>Since starting HD, Gloria has suffered from washout symptoms post-HD. She has occasionally mentioned feeling fatigued to her favorite RN and PCT. She accepts her 5-hour nap after dialysis as “normal,” and she does not recover from HD until lunchtime the next day. Gloria wants to spend more time with her grandkids, but is too tired in the mornings when they are not at daycare.</p> <p>Gloria also has worsening arthritic knee pain. Acetaminophen no longer alleviates the pain, preventing her from gardening. She had a PCP prior to dialysis, but has stopped seeing him. She has not mentioned her knee pain at dialysis as she feels it is not dialysis-related.</p>
Person-centered care planning approach	
1. Prepare for meeting – patient	
SW gives Gloria My Dialysis Plan™ education materials 2 weeks prior to care plan meeting. Gloria reviews brochure and selects an off-the-floor care plan meeting with Sydney present.	
2. Prepare for meeting – care team	
Care team members (SW, RD, MD, RN) huddle before meeting, and express no medical/dialysis concerns about Gloria from individual assessments. They decide SW will lead the care plan meeting.	
3. Identify patient priorities	
At meeting, SW starts by asking, “What does a good day look like for you?” Gloria responds that she is happy to be alive, and loves spending time with her grandchildren. SW follows with, “What else is important to you?” Gloria describes she wants to spend more time with her grandchildren. SW probes again, “What did you do before dialysis that you cannot do now, if anything?” Gloria mentions gardening, but dismisses feasibility due to age, knee pain.	



4. Identify barriers and/or facilitators of priorities	
<i>Barriers-</i> post-HD fatigue limits family time, knee pain limits gardening	
5. Discuss and agree on action steps and follow-up plan	
<i>Post-dialysis fatigue:</i> MD reviews medications and identifies carvedilol and sertraline as potential contributors. Gloria prefers to stay on sertraline because it helps with her mood. MD will contact Gloria's cardiologist about potential of stopping carvedilol. If no medication changes, team will conduct time-limited trial of shorter HD (Kt/V at target and minimal weight gains). [V543- dialysis dose, V544- Kt/V, V552- psychosocial status]	
<i>Arthritic pain:</i> Review bone health via bone-mineral-disease labs. PTH 905 pg/mL and phosphorus 6 mg/dL, calcium 9.4 mg/dL. She is taking calcitriol and sevelamer. She does not always take her binder because they are difficult to swallow. She is willing to try liquid form. Team reviews prior strategies- non-steroidals (NSAIDs), acetaminophen, and ice. The team decide the risks of NSAIDs outweigh the benefits (+ residual kidney function, ~250 mL/day). All agree to a trial of tramadol and a physical therapy (PT)/ occupational therapy (OT) referral for help with an exercise program. The team also discusses adaptive equipment (e.g. kneepads, rolling gardening seat) and alternative ways to garden. Sidney commits to buying elevated gardening boxes for Gloria. [V546- mineral metabolism, V555- rehabilitation status]	
6. Discuss care team-identified issues	
None (mineral metabolism already covered)	
7. Discuss remaining Conditions of Coverage requirements as needed	
Anemia + ESA responsiveness [V547, V549- anemia] Nutritional status [V545- nutritional status] Vascular access [V550, V551- access] Modality [V553- modality] Transplant [V554- transplant]	
8. Complete electronic health record care plan	
Complete online care plan with signatures prior to meeting end.	
9. Take action	
<i>Post-dialysis fatigue:</i> Cardiologist recommends continuing carvedilol. MD follows up with Gloria who decides to stay on carvedilol. Team initiates time-limited trial of 3h 45 min HD treatments with formal weekly time to recovery assessment on Mondays (by SW). After reassessment, team will consider further reduction in treatment time depending on her response to the initial time reduction.	
<i>Arthritic pain:</i> Change to liquid binder, trial of tramadol, window planters, PT/OT referral placed	
10. Follow-up and assess	
<i>Post-dialysis fatigue:</i> After 1mo, some improvement in recovery time but still napping for multiple hours, Kt/V 1.5. Reduce time to 3h 30 min.	
<i>Arthritic pain:</i> After 1mo, tolerating liquid binder (phos 5.2), tramadol causes confusion. Still getting planters. Has first appt with PT/OT in 1 week.	
11. Continue follow-up and reassess	
Post person-centered care planning state	
Post-conditions 1) more time with grandchildren 2) modified gardening	Gloria's time to recovery after HD improved with a 30-min reduction in her treatment time, and her Kt/V is 1.4. She is taking her liquid binder as prescribed. She now feels well enough to see her grandchildren on her non-dialysis days. She continues to struggle with ground-based gardening but enjoys her new window box gardens.
Summary	This case shows how patient-identified priorities can be linked to elements of the care plan that are required by the Conditions of Coverage, facilitating patient and care team shared decision-making and more individualized care.

Abbreviations: SW, social worker; MD, medical provider.

