




Supplemental Table 1. Shared Decision-Making: Patient Decision Aids and Professional Training Resources		
Patient Facing Resources		
Decision Aid	Strength(s)	Link
Decision Aid for Renal Therapy (DART) (USA)	<ul style="list-style-type: none"> • Interactive videos. • Produces a printout. 	https://patient.health-ce.wolterskluwer.com/DART/programs (password: TEST)
My Kidneys, My Choice (Australia)	<ul style="list-style-type: none"> • Prioritizes lifestyle values. • Uses open-ended questions. 	My Kidneys My Choice Kidney Health Australia (https://kidney.org.au/)
Yorkshire Dialysis Decision Aid YoDDA (United Kingdom)	<ul style="list-style-type: none"> • Provides an overview of all kidney failure treatments, but with a focus on dialysis modalities. • Downloadable PDF. 	YoDDA Research Study (www.yodda.leeds.ac.uk/Survey/Information)
Yorkshire Dialysis and Conservative Care Decision Aid YoDCA (United Kingdom)	<ul style="list-style-type: none"> • Compares dialysis and conservative management. • Downloadable PDF. 	https://www.kidneyresearchyorkshire.org.uk/yorkshire-dialysis-and-conservative-care-decision-aid/
My Life, My Choice (Medical Education Institute) (USA)	<ul style="list-style-type: none"> • Offered in English and Spanish. • Examines patient values. • Interactive and online. 	https://mykidneylifeplan.org/#eyy
Best Case/Worst Case Nephrology (The Patient Preferences Project) (USA)	<ul style="list-style-type: none"> • Uses narrative and hand-written graphic aid to illustrate a choice between treatments and engage patients. • Online videos to guide use. 	https://patientpreferences.org/bcwc-nephrology/
Conservative Kidney Management Patient Decision Aid (Canada)	<ul style="list-style-type: none"> • Patient facing health care professional support • Downloadable PDF 	Conservative Kidney Management https://www.ckmcare.com/?HomePage=YES
A Guide to Conservative Kidney Management (USA)	<ul style="list-style-type: none"> • Provides quotations from patients and caregivers about their perspectives on conservative management • Downloadable PDF 	https://www.ajkd.org/article/S0272-6386(23)00065-3/fulltext
Professional Resources		
NephroTALK	<ul style="list-style-type: none"> • Online curriculum developed to build skills in conservative care without dialysis and help patients decide if this treatment plan is right for them. • Includes skill-building worksheet comprised of 	http://nephro-talk.com/

	<p>questions and exercises that are presented throughout the four modules.</p>	
VitalTalk	<ul style="list-style-type: none"> • Courses (online or in person) to train clinicians to have better, more meaningful conversations with patients and families—especially during serious illness. • Frames communication as a structured, learnable, and teachable process to help clinicians build confidence and competence. • Goal is to help improve decisions, reduce stress, and put patient values at the center of care. 	Home - VitalTalk
Serious Illness Conversation Guide	<ul style="list-style-type: none"> • Inclusive and accessible for diverse patients with serious illness and their important people. • Improved (in 2023) to make the tone of the Guide more conversational and emotionally safe. • Uses: <ul style="list-style-type: none"> ○ Talk to patients about their goals and values ○ Set up the conversation ○ Assess the patient’s illness understanding and information preferences ○ Share prognosis ○ Explore key topics ○ Close and document the conversation 	Serious-Illness-Conversation-Guide.2023-05-18.pdf
REMAP Framework	<ul style="list-style-type: none"> • REMAP: Reframe, Expect emotion, Map out patient goals, Align with goals, and Propose a plan • Structured approach designed to facilitate effective goals of care conversations between clinicians and patient, 	https://www.ethics.va.gov/goalsofcaretraining/REMAP.pdf Comm-Childers-REMAP-JOncPractice-2017.pdf
Coalition for Supportive Care of Kidney Patients	<ul style="list-style-type: none"> • Evidence Based Tools and resources for clinicians and patients 	Coalition for Supportive Care of Kidney Patients The George Washington University

Supplemental Table 2. Mortality and Disease Progression Calculators			
Name	website	Pros	Cons
Kidney Failure Risk Equation	https://www.kidneyfailurerisk.com/	<ul style="list-style-type: none"> • Easy to use • Easy to read • Validated • Companion guide 	<ul style="list-style-type: none"> • Progression to kidney failure, not life expectancy on dialysis or conservative management
Charlson Comorbidity Index	https://www.mdcalc.com/calc/3917/charlson-comorbidity-index-cci	<ul style="list-style-type: none"> • Easy to use • Mortality risk 	<ul style="list-style-type: none"> • Not specific to CKD/ESKD
iChoose Kidney	https://ichoosekidney.emory.edu/	<ul style="list-style-type: none"> • Developed in US and validated • Easy to Use • Visual • 1 and 3 year mortality 	<ul style="list-style-type: none"> • Risk specific to dialysis vs transplant; no conservative management
Australian-modified Karnofsky Performance Scale	https://link.springer.com/article/10.1186/1472-684X-4-7	<ul style="list-style-type: none"> • 1-year mortality in incident patients on dialysis 	
6-month clinical prognostic score	https://pmc.ncbi.nlm.nih.gov/articles/PMC3094349/	<ul style="list-style-type: none"> • 6-month risk of death and death from dialysis withdrawal in incident patients on dialysis aged 75+years 	<ul style="list-style-type: none"> • Developed and validated in French population

Supplemental Table 3. Conservative management in practice					
Trajectory (approximate time from death)	Patient Condition	Medical Information	Conservative Management Pathway		
			Customized CKD Care	Symptom Management	Transition Navigation
Stable or slowly declining (months-years) 	Able to care for most needs independently	A 78-year-old man with an eGFR 13 mL/min/1.73 m ² and moderate dementia. His BP is 148/87 mm Hg, hemoglobin is 10 g/dL and potassium is 5.4 mEq/dL	<ul style="list-style-type: none"> Nephrology visits with lab monitoring every 2-3 months. HTN: Losartan 100mg daily, amlodipine 5mg daily, furosemide 40mg daily. BP goal liberalized to < 150/90 mm Hg. Hyperkalemia: Sodium zirconium cyclosilicate 10g daily Anemia: erythropoetin 4000 units every 2 weeks 	<ul style="list-style-type: none"> Screening symptoms with IPOS-Renal tool reveals mild pruritus and dysgeusia. Pruritus: moisturizer BID, gabapentin 100mg every other night Dysgeusia: sodium bicarbonate mouth rinses prior to eating 	<ul style="list-style-type: none"> Counsel that dementia and difficulty with medical decision-making may be exacerbated by kidney failure. Complete durable power of attorney indicating his wife and daughter are his healthcare proxies. Complete advance directive indicating wishes to avoid hospitalization but will accept it for potentially reversible issues (e.g. pain, infection)
Deteriorating (weeks-months) 	Able to self-care for some needs, requires considerable assistance	Patient falls and fractures an elbow, hospitalized and found to have a UTI and delirium. The fracture is treated non-operatively and patient is discharged home. Patient eGFR is 10 mL/min/1.73 m ² , BP is 107/75 mm Hg, hemoglobin is 9.5 g/dL and potassium is 5.2 mEq/dL. Patient has 1+ leg edema.	<ul style="list-style-type: none"> HTN: Stop losartan, and amlodipine Hyperkalemia: No change in plan Edema: no change to furosemide, permissive edema to avoid increased risk of falls with higher dose Anemia: No change to erythropoietin. 	<ul style="list-style-type: none"> Follow-up IPOS-Renal tool reveals arm pain, insomnia, anorexia and fatigued; less able to socialize and leave home. Pain: Acetaminophen 1000mg TID, topical lidocaine patches Insomnia/anorexia: mirtazapine 7.5mg QHS Refer to social work to assess caregiver support and place home care referral Create action plan for possible pain or dyspnea crisis 	<ul style="list-style-type: none"> Clarify wishes to avoid further hospitalization Update advance directive and complete a portable medical order indicating preference for DNR/DNI. Discuss the option of home hospice if condition worsens.

<p>Rapidly declining (days-weeks)</p> 	<p>Unable to self-care, requires 24hr assistance</p>	<p>Patient loses 8lbs and spends most of the day in bed. Patient eGFR is 7 mL/min/1.73 m², hemoglobin is 9 g/dL and potassium is 5.2 mEq/dL. The edema has been resolved. Patient is eating very little.</p>	<ul style="list-style-type: none"> • Stop lab monitoring • HTN: change furosemide to PRN for edema • Hyperkalemia: Stop sodium zirconium cyclosilicate due to poor appetite • Anemia: Stop erythropoietin given reduced function and limited life expectancy 	<ul style="list-style-type: none"> • Follow-up screening with IPOS-Renal reveals intermittent nausea and vomiting, myoclonus, memory loss and episodes of agitation. • Nausea/agitation: olanzapine 2.5mg BID • Anorexia: stop mirtazapine 	<ul style="list-style-type: none"> • Inform patient and family of terminal stage of kidney disease and that time is short. • Answer family's questions about what the dying process might look like. • Refer to hospice, consider inclusion of chaplain services to explore existential and anticipatory grief.
<p>Abbreviations: BP, Blood Pressure; DNR/DNI, Do Not Resuscitate/Do Not Interact; eGFR, estimated glomerular filtration rate; HTN, hypertension; IPOS-Renal, Palliative Care Outcome Scale; QHS, every night at bedtime; TID, three times a day; UTI, Urinary Tract Infection.</p>					

Supplemental Table 4. Geriatric Assessment Tools			
Geriatric Syndrome	Assessment Tool	Links	Administration Notes
Cognitive Impairment	Montreal Cognitive Assessment (MoCA)	https://www.mocacognition.com/the-moca-test/	<ul style="list-style-type: none"> Any clinician, health professional, researcher or worker who has successfully completed the official MoCA training and certification module can administer and score MoCA. Only health professionals with expertise in the cognitive field should interpret the results. The paper test is available in nearly 100 languages. The app test is available in 5 languages with more coming every month. Completion time: 10-12 minutes 30 questions
Functional Impairment	Lawton Instrumental Activities of Daily Living (IADL) Scale	https://neurotoolkit.com/lawton-iadl-scale/	<ul style="list-style-type: none"> Self-report questionnaire or interview by health professional may be used in community, clinic, or hospital settings. The instrument is not useful for institutionalized older adults. Completion time: 10 – 15 minutes 8 item scale
	Katz Index of Independence in Activities of Daily Living	https://hign.org/sites/default/files/2020-06/Try_This_General_Assessment_2.pdf	<ul style="list-style-type: none"> Ranks adequacy of performance in the six functions of bathing, dressing, toileting, transferring, continence, and feeding. older adults in the community and all care settings Completion time: less than five minutes to perform and requires training/observation based
Falls	Fall Efficacy Scale	https://hign.org/sites/default/files/2022-11/FES-1.pdf	<ul style="list-style-type: none"> Physicians, nurses, physical and occupational therapists can be administered in clinical settings or research environments 16 items Completion time: 5-10 min
Medication Risks	American Geriatric Society Beers Criteria	https://agsjournals.onlinelibrary.wiley.com/doi/10.1111/jgs.18372	<ul style="list-style-type: none"> Clinicians review medication list or bottles to inform prescribing decisions

Mood	Patient Health Questionnaire (PHQ)-9	https://www.mdcalc.com/calc/1725/phq9-patient-health-questionnaire9	<ul style="list-style-type: none"> • Self- assessment • Completion time 3 minutes • 9 item scale
	Geriatric Anxiety Inventory Short Form (GAI-SF)	https://gai.net.au/	<ul style="list-style-type: none"> • 5 items • Completion time 1-2 minutes
What Matters Most	Patient Priorities Identification tools	https://patientprioritiescare.org/health-professional-toolkit/	<ul style="list-style-type: none"> • Self-assessment or clinician driven • 15-30 minutes completion time

Supplemental Table 5. Customized nutritional guidance		
Area	Disease-centered approach	Person-centered approach
Calories	<ul style="list-style-type: none"> • Most adults: 25–35 kcal/kg/day • Sedentary: ~25–30 kcal/kg/day • Underweight or catabolic: ~ 30–35 kcal/kg/day 	<ul style="list-style-type: none"> • Reassure patients and care partners that reduced appetite is normal and expected with kidney failure • Honor personal values and meaning assigned to food. • Use oral nutrition supplements or appetite stimulants, if needed.
Protein	<ul style="list-style-type: none"> • Most adults: 0.6–0.8 g/kg/day (low protein diet) • Sarcopenia or frailty: 0.6–1.0 g/kg/day 	<ul style="list-style-type: none"> • Use patient-preferred protein sources. • Use protein supplements, if needed or desired based on patient goals.
Sodium	<ul style="list-style-type: none"> • Most adults: 2-3 g Na/day • Hypertension and/or volume overload: <2g Na/day 	<ul style="list-style-type: none"> • Use diuretics to manage volume status occasionally or regularly so patients can enjoy special meals. • Liberalize Na intake with careful monitoring, if needed (e.g., severe anorexia)
Potassium	<ul style="list-style-type: none"> • Most adults: 2-4g K/day • Hyperkalemia: <2g K/day • Use K resins and kaliuretics • Stop or reduce K-sparing diuretics • Stop or reduce ACEI, ARB and MRA • Control metabolic acidosis 	<ul style="list-style-type: none"> • Allow higher serum K if asymptomatic so can enjoy favorite foods. • Use K leaching techniques (e.g., boiling foods) • Consider K binding resin if tolerated
Phosphorus	<ul style="list-style-type: none"> • Limit natural foods with high phosphate content • Limit processed foods with phosphate additives. • Use phosphate binders 	<ul style="list-style-type: none"> • Allow occasional “cheat” foods with binder use or portion control. • Allow for high PO₄ levels, if needed (e.g., malnutrition)
Fluids	<ul style="list-style-type: none"> • Euvolemia: drink to thirst • Hypervolemia: restrict and use diuretics as needed. • Check daily weights and for peripheral edema. 	<ul style="list-style-type: none"> • Allow small sips, ice chips for comfort • Allow occasional use of diuretics for special high sodium meals
Micronutrients	<ul style="list-style-type: none"> • Check for deficiencies (calcium and vitamin D, iron stores, magnesium, etc.). • Replace deficiencies as needed. 	<ul style="list-style-type: none"> • If a multivitamin helps a patient’s wellbeing, continuation is reasonable. • Zinc and selenium deficiency can contribute to anorexia and dysgeusia; replace if needed.
Metabolic acidosis	<ul style="list-style-type: none"> • Assess serum bicarbonate • Give bicarbonate supplementation as appropriate • Favor a plant- (vs. animal-) dominant low-protein approach to reduce acid load. 	<ul style="list-style-type: none"> • Correcting metabolic acidosis can improve energy and muscle mass. • Allow lower HCO₃⁻ if needed, (e.g. high pill burden with bicarbonate supplementation) • May target for higher HCO₃⁻ to help with shortness of breath
<p>Legend: ACE, angiotensin-converting enzyme; ARB, angiotensin II receptor blocker; g/kg, grams to kilogram; HCO₃⁻, bicarbonate; K, potassium; kcal/kg, kilo calories per kilogram; MRA, mineralocorticoid receptor antagonists; Na, sodium; PO₄, phosphorus.</p>		

Supplemental Table 6. Validated tools for symptom assessment		
Tool	Purpose	Link
Edmonton Symptom Assessment System Revised: Renal (ESAS-r: Renal)	<ul style="list-style-type: none"> Includes depression, anxiety and overall wellbeing 	https://www.mdcalc.com/calc/10429/edmonton-symptom-assessment-system-revised-esas-r
Palliative Care Outcome Scale (IPOS-Renal)	<ul style="list-style-type: none"> Assesses 11 common symptoms and other concerns, such as information needs, practical issues, family anxiety. 	https://pos-pal.org/maix/ipos-renal-in-english.php
Karnofsky Performance Scale Index	<ul style="list-style-type: none"> Assesses functional status and ability to perform activities of daily living. 	https://www.mdcalc.com/calc/3168/karnofsky-performance-status-scale
CSHA Clinical Frailty Scale (CFS)	<ul style="list-style-type: none"> Assesses frailty 	https://www.mdcalc.com/calc/10300/csha-clinical-frailty-scale-cfs
General Anxiety Disorder-7 (GAD-7)	<ul style="list-style-type: none"> Screens for symptoms of anxiety 	https://www.mdcalc.com/calc/1727/gad7-general-anxiety-disorder7
Personal Health Questionnaire (PHQ-9)	<ul style="list-style-type: none"> Screens for depressive symptoms 	https://www.mdcalc.com/calc/1725/phq9-patient-health-questionnaire9