The Ethics of AKI in the ICU: When Can (Should) You Say "No"?

Alvin H. Moss, MD
Sections of Nephrology &
Palliative Medicine
Center for Health Ethics and
Law
West Virginia University
Morgantown, WV





The Dialysis Default Is Increasingly Problematic for Older Patients with Kidney Failure

Alvin H. Moss, MD
Sections of Nephrology and
Geriatrics & Palliative Medicine
Center for Health Ethics and Law
West Virginia University
Morgantown, WV
amoss@hsc.wvu.edu



Disclosures

No relevant financial relationships to disclose.



Learning Objectives

- Present the outcomes of dialysis for older patients with comorbidities
- Discuss default options in medicine and their consequences for patients with kidney failure
- Explain the status of the American Society of Nephrology Choosing Wisely recommendation to conduct a shared decision-making process prior to the initiation of dialysis
- Describe the yet-to-be implemented patient-centered range of options for treatment of kidney failure in older adults

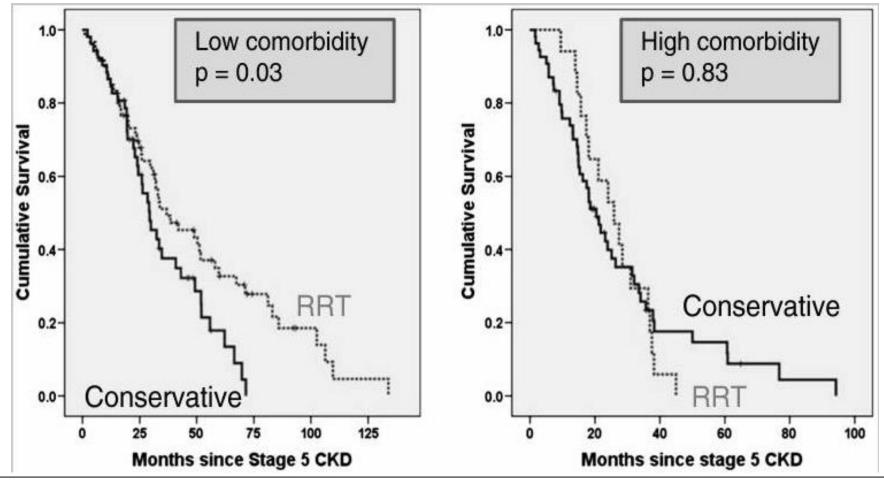


Mr. G and Moral Distress in the Nephrology Fellow

- Mr G is an 82 y.o. male with progressive Lewy Body Dementia
- PMH stage 4 chronic kidney disease followed by nephrologist
- Deteriorating mental status and progressive functional decline
- In ED transient hypothermia to 33.9 with aspiration pneumonia and septic shock
- Deep sacral pressure sore with underlying osteomyelitis
- Receives urgent hemodialysis for uremic encephalopathy
- Bedbound, unable to transfer from bed to chair
- At discharge family wants to continue dialysis
- Nephrology fellow reports moral distress over initiation/continuation of dialysis
- Concerned about overtreatment and causing more harm than good



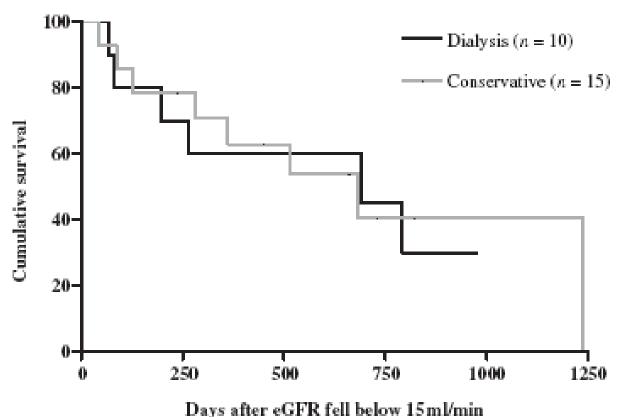
High Comorbidity Impacts Survival in the Elderly



Chandna et al. Survival of elderly patients with stage 5 CKD: Comparison of conservative management and RRT. *Nephrol Dial Transplant*. 2010; 26(5): 1608-1614.

of Kidney Patients

Comparative survival of CKD > 75 years with/without dialysis



Murtagh et al. NDT, 2007

Kaplan-Meier survival curves for those with high comorbidity (score=2), comparing 5 dialysis and conservative groups (log rank statistics <0.001, df 1, *P*=0.98).



Poor Outcomes with NH Patients Starting Dialysis

- 3,702 NH residents starting dialysis between 1998-2000
- Most died in the first year (58%); 29% lost function; and only 13% maintained pre-dialysis functional level.

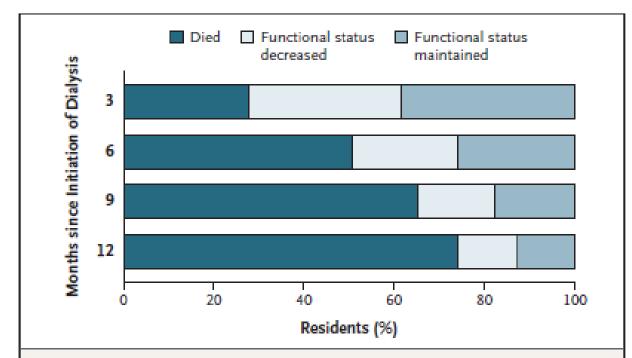


Figure 2. Change in Functional Status after Initiation of Dialysis.

Data were missing for 549 nursing home residents at 3 months, 696 residents at 6 months, 823 residents at 9 months, and 787 residents at 12 months from the full analytic cohort of 3702 residents.

Kurella Tamura M et al. NEJM 2009



Comparative Survival among Older Adults with Advanced Kidney Disease Managed Conservatively Versus with Dialysis

CJASN 2016

Results No survival advantage for patients > 80 years old with dialysis vs CM.

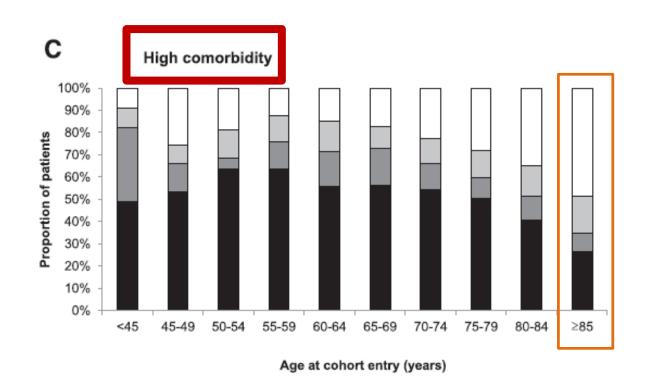
Table 2.	Multivariate Cox proportional hazards model for survival in 311 patients ages ≥70 years old (107 patients with conservative
managen	ment and 204 patients with RRT) using the time of modality choice as the starting point in survival calculation

Variable	Hazard Ratio	95% Confidence Interval	P Value
Age, yr	1.05	1.01 to 1.08	0.01
Davies comorbidity score (no comorbidity as reference)			< 0.001
Intermediate comorbidity	1.89	1.01 to 3.52	
Severe comorbidity	4.11	2.15 to 7.85	
Treatment modality (CM versus RRT; CM as reference)	0.62	0.42 to 0.92	0.02

CM, conservative management.

Conclusions In this single–center observational study, there was no statistically significant survival advantage among patients ages ≥80 years old choosing RRT over CM. Comorbidity was associated with a lower survival advantage. This provides important information for decision making in older patients with ESRD. CM could be a reasonable alternative to RRT in selected patients.

Age differences in treatment decisions and practices for advanced CKD stratified by comorbidity score



□ Decision against dialysis*

Discussing and/or preparing for dialysis*

■ Received dialysis*

 Enrollment in USRDS or had a dialysis procedure code in Medicare of VA files Wong SPY. Decisions about RRT in Advanced CKD Patients. *CJASN* 2016.



Significant Prognostic Predictors in Patients with Kidney Disease

Age

Comorbidities

Functional Status

Nutritional Status

Frailty

Cognitive impairment



Wachterman MW, et al. 1-year mortality after dialysis initiation among older adults. *IAMA Intern Med* 2019

Table. Mortality Rates Stratified by Patient Characteristics (N = 391)	Table. Mortality	y Rates Stratified b	y Patient Characteristics (N = 391)
--	------------------	----------------------	-------------------------------------

Characteristic	Total, No. (%) ^a	Died Within 30 Days (n = 88 [22.5%])	Died Within 180 Days (n = 173 [44.2%])	Died Within 365 Days (n = 213 [54.5%])
Age at dialysis initiation, y				
65-74	160 (40.9)	30 (18.7)	56 (35.0)	75 (46.9) ^b
75-84	163 (41.7)	39 (23.9)	76 (46.6) ^b	90 (55.2) ^b
≥85	68 (17.4)	19 (27.9)	41 (60.3) ^b	48 (70.6) ^b
_				

- 22.5% of Medicare beneficiaries initiating dialysis died within 30 days
- 44.2% died within 6 months
- 54.5% died within 1 year
- almost double the 1-year mortality rate reported for older adults in the USRDS registry.



Factors significantly associated with higher one-year mortality

- Dependence in one or more activities of daily living
- Age 85 years or older
- Inpatient dialysis initiation
- 4 or more comorbidities

"The limited survival among older patients who initiated dialysis may help to frame prognostic expectations and support more informative discussions about dialysis initiation in older adults."

Wachterman MW. JAMA Intern Med 2019



A <u>Patient-Specific</u> Estimate of Prognosis for Mr. G

http://touchcalc.com/calculators/sq

Cohen LM et al. CJASN 2010

HD MORTALITY PREDICTOR

Programmed by Stephen Z. Fadem, M.D., FASN and Joseph Fadem

DOWNLOAD IPHONE APP

SERUM ALBUMIN 2.5 g/dL
SURPRISE QUESTION I would NOT be surprised if my patient died in the next 6 months. I would be surprised if my patient died in the next 6 months.
AGE 82 years DEMENTIA My patient HAS dementia. My patient does NOT have dementia.
PERIPHERAL VASCULAR DISEASE My patient HAS peripheral vascular disease. My patient does NOT have peripheral vascular disease.
XBETA: 107.59 Predicted Six Month Survival: 20% Predicted Twelve Month Survival: 2% Predicted Eighteen Month Survival: 0%

SOUNDING BOARD

Harnessing the Power of Default Options to Improve Health Care

- Default options strongly influence behaviors.
- Some people may be harmed by default options.
- For those likely to be harmed by a particular default, forcing people to consciously and deliberately make a decision is preferable.





Care Practices for Patients With Advanced Kidney Disease Who Forgo Maintenance Dialysis

DESIGN, SETTING, AND PARTICIPANTS A qualitative study was performed of documentation in the electronic medical records of 851 adults receiving care from the US Veterans Health Administration between January 1, 2000, and October 1, 2011, who had chosen not to start dialysis. Qualitative analysis was performed between March 1, 2017, and April 1, 2018.

Three themes

- when patients wished to forgo dialysis, it was unusual for clinicians to readily accept patients' decisions. Patients who did not wish to start dialysis had to resist immense pressure from clinicians.
- clinicians viewed some patients as not appropriate for dialysis, usually on the basis of specific characteristics and/or prognosis, rather than after considering patients' values.
- when it was clear that patients would not be starting dialysis, nephrologists often signed off and had few recommendations other than referral to hospice care.

Wong SPY. JAMA Intern Med 2019



Care Practices for Patients With Advanced Kidney Disease Who Forgo Maintenance Dialysis

conclusions and relevance. These findings describe an all-or-nothing approach to caring for patients with advanced chronic kidney disease in which initiation of dialysis served as a powerful default option with few perceived alternatives. Stronger efforts are needed to develop a more patient-centered approach to caring for patients with advanced chronic kidney disease that is capable of proactively supporting those who do not wish to start dialysis.

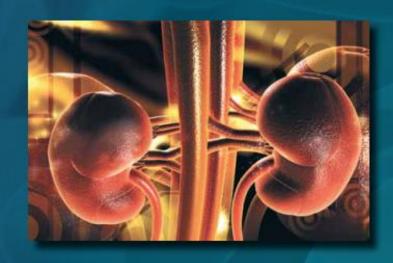
Wong SPY. JAMA Intern Med 2019



Shared Decision-Making in the Appropriate Initiation of and Withdrawal from Dialysis

Clinical Practice Guideline

Second Edition



REPA
Renal Physicians Association

Rockville, Maryland October 2010 Evidence-based Clinical practice guideline

10 Recommendations Practical strategies

Available at RPA online store www.renalmd.org





ASN AGAINST KIDNEY DISEASE

Five Things Physicians and Patients Should Question

5

Don't initiate chronic dialysis without ensuring a shared decisionmaking process between patients, their families, and their physicians.

The decision to initiate chronic dialysis should be part of an individualized, shared decision-making process between patients, their families, and their physicians. This process includes eliciting individual patient goals and preferences and providing information on prognosis and expected benefits and harms of dialysis within the context of these goals and preferences. Limited observational data suggest that survival may not differ substantially for older adults with a high burden of comorbidity who initiate chronic dialysis versus those managed conservatively.

April 4, 2012

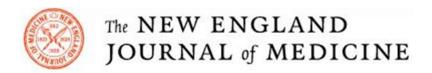


Despite recommendations to the contrary, shared decision-making remains **poorly integrated** into the care of patients with advanced kidney disease.



Shared Decision-Making Relationship

- a <u>process</u> of communication between patient and physician based on patient's overall condition
- reach agreement on a specific course of treatment
 - after patient describes values and preferences
 - physician presents Dx, Px, and treatment alternatives with their attendant benefits and risks
- each participant better understands the relevant factors
- and shares responsibility in the decision

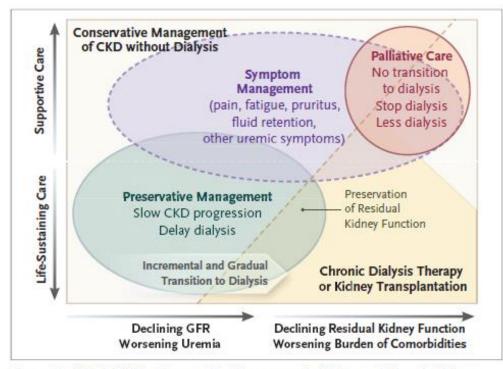


Barry MJ et al. Shared decision making:

The pinnacle of patient-centered care. New Engl J Med 366:780-781, 2012

Ensuring Choice for People with Kidney Failure — Dialysis, Supportive Care, and Hope

PERSPECTIVE ENSURING CH



Conceptual Model of the Conservative Management of Advanced Chronic Kidney Disease (CKD).

GFR denotes glomerular filtration rate.

The NEW ENGLAND
JOURNAL of MEDICINE

- Incremental dialysis
- Time-limited trial of dialysis
- Active medical management without dialysis
- Palliative dialysis

N Engl J Med 2020;383(2):99-101. July 9, 2020



The Ethical Limits of the Technological Imperative

If you can do dialysis, you must do dialysis.

From an ethical perspective, what is wrong with the technological imperative?



Approach to Ethical Case Analysis

- Medical indications
 - When benefits outweigh harms
- Patient preferences
- Quality of life
- Contextual factors
 - Social, financial, legal, spiritual, public health

Jonsen AR, Siegler M, Winslade WJ. *Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine, 8th ed.* New York: McGraw Hill, 2015.



Ethical Consideration: Biomedicalization of Aging

- Biomedicalization of aging has led to the routinization of clinical interventions for older patients.
- Standard practice is replacing choice.
- Societal expectations about standard medical care have resulted in dialysis for kidney failure in all older patients.
- Nephrologists feel obligated to dialyze all elderly patients.



Ethical Consideation: Technological Imperative Has Become a Moral Imperative!

- Goals of medicine to cure and prolong life are in conflict with those to minimize suffering and maximize QoL.
- Kaufman et al have reported that patients with kidney disease said that they were started on dialysis without realizing that they had a choice.
- Nephrologists have been influenced by the technological imperative which became a moral imperative to treat all kidney failure meeting criteria for dialysis with dialysis.



Establishing a Shared Decision-Making Relationship with CKD and ESRD Patients

- Rec No. 1: Develop a physician-patient relationship for shared decision-making.
- Shared decision-making is the recognized preferred model for medical decision-making because it addresses the ethical need to fully inform patients about the risks and benefits of treatments, as well as the need to ensure that patients' values and preferences play a prominent role.



Establishing a Shared Decision-Making Relationship with CKD and ESRD Patients

- Recommendation No. 3
- Give all patients with AKI, stage 5 CKD, or ESRD an estimate of prognosis specific to their overall condition.

RPA. Shared Decision-Making in the Appropriate Initiation of and Withdrawal from Dialysis. 2nd. 2010.



Making a Decision to Not Initiate or to Discontinue Dialysis

- Recommendation No. 5
- If appropriate, forgo dialysis for patients with AKI, CKD, or ESRD in certain, well-defined situations.
 - Patients with decision-making capacity, who being fully informed and making voluntary choices,
 refuse dialysis or request that dialysis be discontinued.
 - Patients who no longer possess decision-making capacity who have previously indicated refusal of dialysis in an oral or written advance directive.
 - Patients who no longer possess decision-making capacity and whose properly appointed legal agents/surrogates refuse dialysis or request that it be discontinued.
 - Patients with irreversible, profound neurological impairment such that they lack signs of thought, sensation, purposeful behavior, and awareness of self and environment.



Making a Decision to Not Initiate or to Discontinue Dialysis

- Recommendation No. 6
- Consider forgoing dialysis for AKI, CKD, or ESRD patients who have a very poor prognosis, or for whom dialysis cannot be provided safely.



Resolving Conflicts about What Dialysis Decisions to Make

- Recommendation No. 7
- Consider a time-limited trial of dialysis for patients requiring dialysis, but who
 have an uncertain prognosis, or for whom a consensus cannot be reached about
 starting dialysis.



Evaluating the Older Patient with Kidney Failure

- What is patient's age?
- What are comorbidities and how severe are they?
- Is the patient frail?
- What is the patient's functional status? In NH?
- What is the patient's nutritional status?
- What is the overall prognosis? Is dialysis medically indicated?
- Will patient be able to tolerate and cooperate with the dialysis process?
- Is the patient decisionally capable? If so, what are values, preferences, and goals?
- If not, are there advance directives? Who is legal decision-maker?
- Did patient specify treatments wanted/not wanted?



Journal of the American Geriatrics Society

Epub ahead of print. March 2021

Should we recommend dialysis for older patients with kidney failure and dementia?

Alvin H. Moss MD^{1,2} D | R. Osvaldo Navia MD²

Audience Response Question



We question dialysis for older patients with kidney failure and dementia for these reasons:

- they may not live any longer with dialysis than without it, especially if they have other comorbidities which they usually do
- they have a twofold higher mortality risk than those without dementia
- they are less likely to do well on dialysis and more likely to stop it
- the dialysis center is a "dementia-unfriendly" environment, and they may not be able to cooperate safely with the dialysis process and
- they experience a significant decline in cognitive function after dialysis initiation



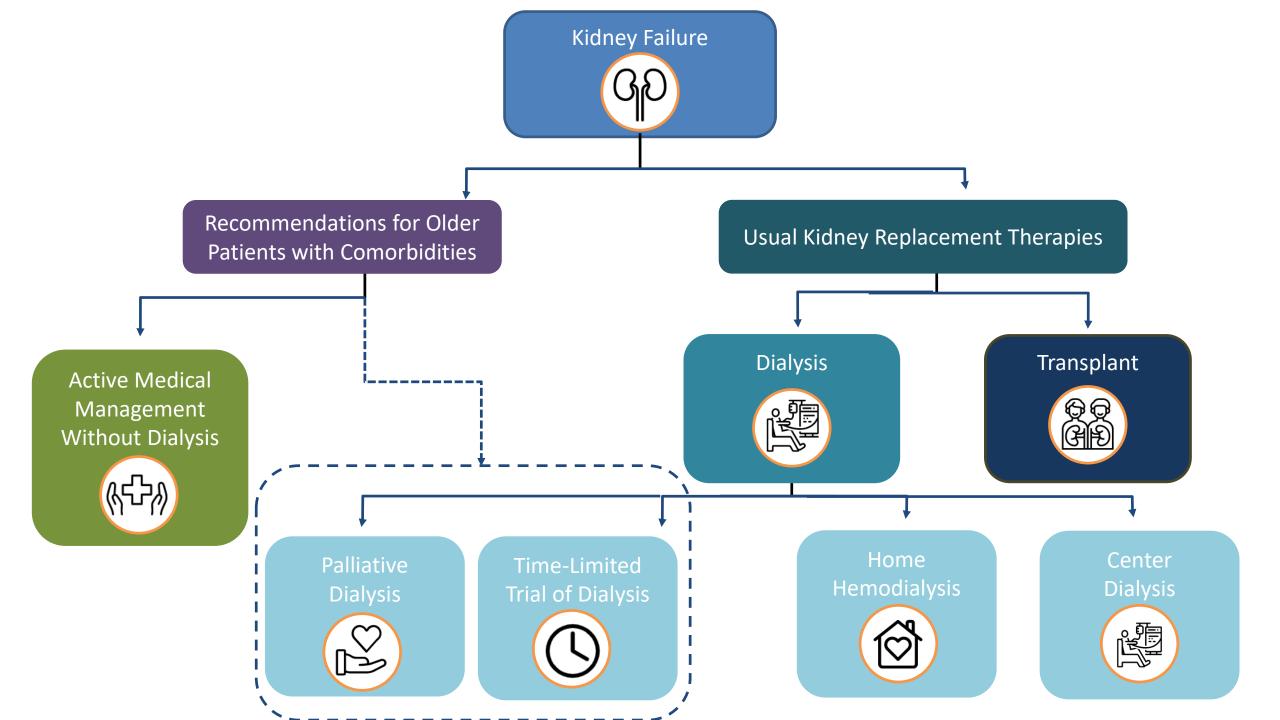
Key Points

- Older patients with kidney failure and dementia may not live any longer with dialysis than without it.
- The default is to start them on dialysis.

Why Does this Paper Matter?

Instead of the default, it calls for explicit shared decision-making with treatment options
other than the usual center and home dialysis.





Mr. G and Moral Distress in the Nephrology Fellow

- Mr G is an 82 y.o. male with progressive Lewy Body Dementia
- PMH stage 4 chronic kidney disease followed by nephrologist
- Deteriorating mental status and progressive functional decline
- Bedbound, unable to transfer from bed to chair
- In ED transient hypothermia to 33.9 with aspiration pneumonia and septic shock
- Deep sacral pressure sore with underlying osteomyelitis
- Receives urgent hemodialysis for uremic encephalopathy
- At discharge family wants to continue dialysis
- Nephrology fellow reports moral distress over initiation/continuation of dialysis
- Concerned about causing more harm than good
- How should kidney replacement therapy have been approached for Mr. G?



Audience Response Question about Mr. G

Discussed in ADVANCE in a shared-decision-making process and

A. not offer dialysis and instead recommend palliative care with active medical management without dialysis and hospice

B. recommend against maintenance dialysis because there is a low likelihood of benefit and a high likelihood of harm from it and offer as alternatives active medical management without dialysis, palliative dialysis, and a time-limited trial of dialysis OR

C. recommend a time-limited trial of dialysis to determine the relative benefits and harms of dialysis



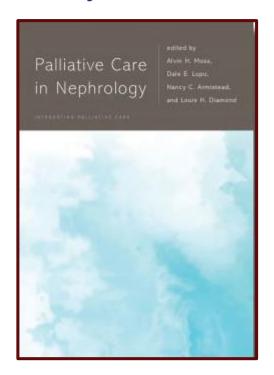
Bottom Line

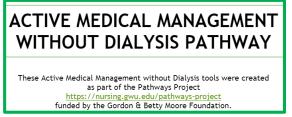
- Analyze the patient's overall condition taking into account factors known to influence prognosis prior to offering dialysis to older patients with kidney failure.
- Review advance directives if patient lacks decision-making capacity.
- Dialysis should NOT automatically be offered to older patients with kidney failure, especially if they have underlying significant comorbidities.
- Start dialysis as a <u>time-limited trial</u> for those for whom the benefit is uncertain and patient/legally authorized representative wants to proceed.
- Nephrologists can say "No" to dialysis when the burdens are predicted to substantially outweigh the benefits-Hippocratic maxim!
- Consider ethics/palliative/supportive care consultation for cases in which dialysis can be predicted to be of limited or no benefit, but the patient/family are requesting it.





Resources from the Coalition of Supportive Care for Kidney Patients and Pathways









go.gwu.edu/ammwd