

Integrating Geriatric Evaluation into End-Stage Kidney Disease Decision-Making: Why Are We Still Waiting?

Ana Farinha^{1,2*}, Josefina Santos^{3,4,5}, Mariana Alves⁶

1. Department of Nephrology, Unidade Local de Saúde (ULS) Arrábida, Setúbal, Portugal

2. ICBAS- School of Medicine and Biomedical Sciences, University of Porto, Porto, Portugal

3. Department of Nephrology, ULS de Santo António, Porto, Portugal

4. Unit for Multidisciplinary Research in Biomedicine (UMIB), ICBAS- School of Medicine and Biomedical Sciences, University of Porto, Porto, Portugal

5. Laboratory for Integrative and Translational Research in Population Health (ITR), Porto, Portugal.

6. Faculdade de Medicina, Universidade de Lisboa, Lisboa, Portugal

<https://doi.org/10.71749/pkj.153>

Keywords: Clinical Decision-Making; Functional Status; Geriatric Assessment; Principle-Based Ethics; Renal Replacement Therapy

INTRODUCTION

One of the cornerstone responsibilities in clinical nephrology is to guide patients with end-stage kidney disease (ESKD) through the complex process of selecting the most appropriate kidney replacement therapy (KRT). While kidney transplantation is unequivocally the gold standard for younger, fit patients—offering superior survival rates and quality of life¹—the contemporary nephrological landscape is increasingly dominated by an aging and medically vulnerable population. Within this multifaceted population, the clinical challenge is twofold. First, clinicians must objectively evaluate patients' capacity to understand complex medical information, a pre-requisite for truly informed consent and meaningful shared decision-making. Second, clinicians must determine which therapeutic modality aligns with both optimal clinical outcomes and patient-centered goals.

Recognizing the complexity of caring for older patients with advanced chronic kidney disease (CKD), the European Renal Association (ERA) and the European Union Geriatric Medicine Society (EUGMS) jointly published guidelines for the management of older patients with CKD stage 3B or higher.² These guidelines elevate functional status to a critical clinical endpoint, placing it alongside traditional outcomes such as survival, quality of life, and the rate of kidney function decline. Despite this evolving perspective in the literature, the foundational concepts of functional status and their intersection with the bioethical

principles underlying KRT selection remains inadequately integrated into everyday clinical practice. This article provides a critical appraisal of these concepts and examines their relevance to the ethical and clinical care of the older ESKD population.

IMPORTANCE OF FUNCTIONAL ASSESSMENTS IN NEPHROLOGY

The integration of functional and disability assessments into nephrology practice is not merely a matter of clinical rigor but also a bioethical imperative, ensuring that KRT decisions respect the dignity and the lived reality of the older patient.³ Functionality emerges as a more meaningful indicator of health than isolated comorbidities, as it more accurately predicts risks such as falls, hospitalizations, and mortality, thereby moving beyond the limitations of a traditional diagnosis-centered approach.⁴ From a bioethical perspective, the selection of KRT must be grounded in the principles of Beneficence and Non-Maleficence. Without a rigorous functional assessment, nephrologists risk recommending aggressive treatments that, although technically feasible, may lead to “clinical futility,” whereby the burden of therapy substantially outweighs the benefits in terms of quality of life.⁵ Evaluating functionality in nephrology is critical for several reasons: it enables the early identification of functional impairments, allowing timely interventions that may prevent further decline; it supports monitoring progress over time, helping

Received: 28/05/2026 Accepted: 24/08/2026 Published Online: 31/08/2026 Published: 06/10/2026

* Corresponding Author: Ana Farinha | alpfarina@gmail.com | Av. D. João II, nº12, 7º dto, 2910-548 Setúbal, Portugal

© PKJ 2026. Re-use permitted under CC BY-NC 4.0. No commercial re-use.

clinical to evaluate the effectiveness of treatments and rehabilitation strategies and it plays an important role in care planning by guiding decisions regarding the need for support services, rehabilitation programs, or long-term care.⁶ Following the example of Oncology where assessing performance status is routinely measured to guide oncologic treatments, there is a strong rationale for implementing similar assessments in nephrological practice. Assessing functional status enables a transition from a technique-oriented model of care to a more patient-centered approach.

AUTONOMY AND INDEPENDENCE

The core of ethical decision-making in geriatric nephrology lies in the principles of autonomy and independence.⁷ Autonomy and independence are two related yet distinct concepts that are fundamental to an older adult's quality of life, dignity, and overall care.

Autonomy refers to the capacity to think, decide, and act on one's own behalf. It encompasses self-determination, freedom of choice, and the ability to maintain control over one's life, values, and personal decisions. It is based on the right to make one's own choices even if others (including family or doctors) disagree with them. Examples of autonomy include choosing what to eat for lunch, deciding whether to accept a calculated risk, adhering to or declining clinical recommendations, accepting or refusing medical treatments such as KRT, and appointing a power of attorney. Autonomy is primarily compromised through cognitive impairment, such as advanced dementia or delirium, which may diminish an individual's capacity to understand, appreciate, and reason through decisions. Autonomy is not measured with a scale. Instead, clinicians must assess a patient's decision-making capacity for a specific task. To have capacity, a person must generally be able to understand the relevant information, appreciate

how that information applies to their own situation, reason with the information to weigh risks and benefits and communicate a consistent choice.

Independence refers to the physical and functional ability to perform activities of daily living without assistance from another person. It is primarily a measure of physical and functional capacity rather than of decision-making ability. Independence reflects an individual's ability to "do things" for oneself and maintain functional self-sufficiency. Examples of independence are bathing and dressing oneself, cooking a meal, driving a car or using public transport, managing one's own finances and medications, but also managing peritoneal dialysis independently or traveling to a hemodialysis center.⁸ Independence is lost through physical impairment such as severe arthritis, stroke or frailty as well as sensory deficits including visual impairment or blindness.

Although autonomy and independence are distinct concepts, they are closely interconnected and should be evaluated simultaneously. To choose a KRT modality, it is essential to recognize that loss of independence does NOT necessarily imply loss of autonomy (Table 1). When a patient is NOT Independent and NOT Autonomous (a legally designated healthcare proxy makes decisions based on the person's previously expressed wishes. When a patient remains autonomous but is NO longer independent a central ethical and practical emerge: caregivers may inadvertently undermine or override an older person's autonomy, assuming that the person has also lost the right to make decisions, leading to infantilization and paternalism (e.g., "Dad, you're not having that dessert, it is bad for your diabetes," even though Dad has the capacity to make that choice). Preserving autonomy while supporting independence is therefore a fundamental principle of person-centered and ethically grounded care in this scenario.

Table 1. Interaction of autonomy and independence in four possible scenarios

Independent and Autonomous (The Goal)	An older adult lives alone, drives, manages their finances, and makes all their own medical decisions.
Independent but NOT Autonomous (Rarer)	An older adult is physically fit but, due to dementia, is no longer able to make safe decisions. They may be able to cook, but they might forget the stove is on. They have <i>physical independence</i> but lack <i>decision-making autonomy</i>
Autonomous but NOT Independent (Very Common)	An older adult has severe physical limitations (e.g., is bedbound from severe arthritis or past stroke) and is 100% dependent on others for all ADLs (bathing, dressing, feeding). However, they are 100% autonomous. Their minds are clear, and they have the full right and capacity to direct their own care. They can tell a caregiver, "I would like to wear the blue shirt," "I do not want that medication," or "I would like to see my lawyer."
NOT Independent and NOT Autonomous (Total Care):	An individual with advanced dementia who is also bedbound. This person requires full physical assistance (lacks independence) and no longer has the cognitive capacity to make their own decisions (lacks autonomy).

DEFINING FUNCTIONALITY IN OLDER ADULT POPULATIONS

In geriatrics, functionality-or functional status- refers to an individual's capacity to perform the tasks and activities required for independent, safe, and autonomous living.

It is a key indicator of an older adult's health and overall well-being, and is considered more clinically meaningful than the mere presence or absence of a specific disease. Functionality is not just about physical ability; it also integrates cognitive, psychological, and social well-being. This

implies the ability to perform basic activities of daily living (ADLs) such as bathing, dressing, feeding, toileting, and mobility and IADLs, which involve more complex activities required for independent living within the community. Identification of assistance needs in any of these activities is essential because it triggers a target for rehabilitation strategies aimed at improving independence and enhancing quality of life, but also helps guide decision-making by discouraging invasive therapies that are unlikely to meaningfully alter the patient's condition or functional trajectory when functional impairment is severe or and unlikely to improve.

MEASURES OF FUNCTIONALITY

A. Self-Report (or Informant-Report) Scales

These tools involve asking the older adult or a knowledgeable caregiver a standardized set of questions regarding the individual's ability to perform tasks. Measures of ADLs by Katz Index or Barthel Index assess fundamental self-care activities and IADLs are commonly evaluated using the Lawton-Brody Scale.⁹ In both ADL and IADL assessments, lower scores generally indicate greater dependency or higher need for assistance.

B. Performance-Based (Objective) Measures

These tools involve direct observation by a health professional as the older adult performs a standardized set of tasks. Examples of objective functional assessments include the Short Physical Performance Battery (SPPB),¹⁰ the Timed Up and Go (TUG) Test and Hand Grip Strength measurement. These tools are commonly used to assess physical function but also to assess mobility, falls or hospitalization since they are highly predictive of adverse outcomes.

C. Other Performance Status Scales

The Karnofsky Performance Status Scale (KPS) and the Eastern Cooperative Oncology Group (ECOG) Performance Status are measures of functionality developed specifically for oncology rather than general geriatrics. Their primary purpose is to provide a simple, rapid, and widely recognized method for quantifying a patient's functional ability while living with a serious illness, particularly cancer. They are used to guide treatment decisions, as patients with a poor performance status (e.g., ECOG 3-4 or KPS < 50) may be too frail to tolerate aggressive treatments such as chemotherapy or to determine eligibility for clinical trials because most trials require patients to have a good performance status (e.g., ECOG 0-1). They also play an important role in estimating prognosis, since

lower scores are strongly associated with shorter survival. Similarly, decisions regarding KRT should be informed by careful assessment of a person's level of ambulation and capacity for self-care.

D. Cognitive Assessments

Since cognitive impairment often contributes to disability, this domain should also be evaluated. Tools like the Mini-Mental State Examination (MMSE), Montreal Cognitive Assessment (MoCA), or Clock Draw Test can assess cognitive abilities.¹¹

E. Comprehensive Geriatric Assessment

Comprehensive Geriatric Assessment (CGA) is a multidisciplinary evaluation that includes assessments of physical function (ADLs, IADLs, AADLs); cognitive function; psychological state (e.g., depression screening); social support; nutrition and polypharmacy.¹² CGA provides the holistic perspective necessary to assess health and functional status but also to guide care planning, ensuring that treatment decisions are not merely medical prescriptions but a bioethical agreement that respects the individual's current functionality, preferences, and values.⁵ Its use is already implemented in pre-dialysis clinics to support the selection of KRT modalities aligned with patient-centered decision-making.¹³ The authors believe that this approach should be more widely implemented across all settings where ESKD patients are followed, in accordance with current guidelines.

CONCLUSION

While often used interchangeably in casual conversation, in clinical settings, autonomy reflects the patient's right to self-determination, even in the presence of severe physical limitations, whereas independence refers to the physical capacity to perform essential tasks and is essential to access functional status. The distinction is critical because a person can lose one without losing the other and functional status is essential to assess. Ten years after the joint task force between ERA and EUGMS, where functional status has been elevated to a critical outcome, its assessment remains inconsistently performed, highlighting that truly patient-centered care often remains more aspirational than operational. Transitioning from a disease-centered to a patient-centered model requires a profound understanding of patient functionality to uphold bioethical principles, ensure that KRT decisions align with the patient's clinical conditions and personal values, and ultimately improve outcomes through more appropriate and individualized care.

Ethical Disclosures

Conflicts of Interest: The authors have no conflicts of interest to declare.

Financial Support: This work has not received any contribution grant or scholarship.

Provenance and Peer Review: Not commissioned; externally peer-reviewed.

Consent for Publication: Not applicable.

Contributorship Statement

AF and MA: Contributed to the draft of the paper.

JS: Reviewed the manuscript.

All the authors contributed to the article and approved and edited the submitted version.

REFERENCES

1. Tonelli M, Wiebe N, Knoll G, Bello A, Browne S, Jadhav D, et al. Systematic review: kidney transplantation compared with dialysis in clinically relevant outcomes. *Am J Transplant.* 2011;11:2093-109. doi:10.1111/J.1600-6143.2011.03686.X
2. Farrington K, Covic A, Aucella F, Clyne N, de Vos L, Findlay A, Fet al. Clinical Practice Guideline on management of older patients with chronic kidney disease stage 3B or higher (EGFR <45 mL/min/1.73 m²). *Nephrol Dial Transplant.* 2016;32:iii1-iii66. doi:10.1093/ndt/gfw356
3. Moss AH. Ethical Issues in Chronic Kidney Disease Patients. *Chronic Renal Dis.* 2020;1309-20. doi:10.1016/B978-0-12-815876-0.00080-2
4. Keeler E, Guralnik JM, Tian H, Wallace RB, Reuben DB. The impact of functional status on life expectancy in older persons. *J Gerontol A Biol Sci Med Sci.* 2010;65:727-33. doi:10.1093/GERONA/GLQ029
5. Guerville F, Pépin M, Garnier-Crussard A, Beuscart JB, Citarda S, Hocine A, et al. How to make a shared decision with older persons for end-stage kidney disease treatment: the added value of geronto-nephrology. *Clin Kidney J.* 2024;17:281. doi:10.1093/CKJ/SFAE281
6. Ahmed FA, Catic AG. Decision-Making in Geriatric Patients with End-Stage Renal Disease: Thinking Beyond Nephrology. *J Clin Med.* 2018;8:5. doi:10.3390/JCM8010005
7. Salvador-Carulla L, Gasca VI. Defining disability, functioning, autonomy and dependency in person-centered medicine and integrated care. *Int J Integr Care.* 2010;10:e025. doi:10.5334/IJIC.495
8. Slowther AM. The concept of autonomy and its interpretation in health care. *Clin Ethics.* 2007;2:173-175. doi:10.1258/147775007783560166
9. Failure to thrive in older adults: Evaluation - UpToDate. [Accessed May 16, 2026]. Available at: <https://www.uptodate.com/contents/failure-to-thrive-in-older-adults-evaluation#H7>
10. Guralnik JM, Simonsick EM, Ferrucci L, Glynn RJ, Berkman LF, Blazer DG, et al. A short physical performance battery assessing lower extremity function: Association with self-reported disability and prediction of mortality and nursing home admission. *J Gerontol.* 1994;49:M85-94. doi:10.1093/GERONJ/49.2.M85
11. Office-based assessment of the older adult - UpToDate. [Accessed May 16, 2026]. Available at: <https://www.uptodate.com/contents/office-based-assessment-of-the-older-adult#H3287047>
12. Comprehensive geriatric assessment - UpToDate. [Accessed May 16, 2026]. Available at: <https://www.uptodate.com/contents/3009>
13. Brown EA, Farrington K. Geriatric assessment in advanced kidney disease. *Clinical Journal of the American Society of Nephrology. Am Soc Nephrol.* 2019;14:1091-3. doi:10.2215/CJN.14771218