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# ELDER CARE

A Resource for Interprofessional Providers



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## Dialysis in the Older Adult

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More and more older adults with end-stage kidney disease are being treated with dialysis. According to the United States Renal Data System, in 2012 nearly half of patients on hemodialysis in the US were age 65 or older (Table), and older adults are the fastest-growing group of incident dialysis patients. Peritoneal dialysis is used by fewer than 2% of older adults requiring dialysis (Table).

### Considerations Before Starting Dialysis

Older adults who are progressing to end-stage renal disease (ESRD) are a special subset that deserves a more careful approach. They have a high prevalence of frailty making them more vulnerable to stressors associated with their comorbidities and to the complications of dialysis.

Mortality rates are higher for older adults on dialysis than for those who are not. Mortality rates for older adults (aged 75 years and older) are also 3-to-6 times higher than for younger individuals on dialysis. Dialysis patients residing in nursing homes have particularly poor outcomes, with an almost universal decline in functional status and a 58% mortality rate within the first year of starting dialysis.

Studies show, however, that these poor survival statistics are primarily due to the comorbidities that are common in older adults on dialysis. Indeed, once morbidities are taken into account, age is no longer a predictor for higher mortality rates among dialysis patients. Thus, dialysis should not be withheld based on age alone, but comorbidities should be considered when deciding if an older adult will benefit from dialysis.

In addition to considering co-morbidities, the logistics of dialysis must also be considered. The patient will need to present to a dialysis center on specified days and times. Inability to do this will make dialysis impractical.

Overall, it is often difficult for clinicians to make recommendations about whether an older adult should, or

Table. Number of Americans on Dialysis, by Age Group (2012)	
Hemodialysis	
Age <65	221,717
Age ≥65-80	136,044
Age ≥80	50,950
Peritoneal Dialysis	
Age <65	6,101
Age ≥65-80	2,674
Age ≥80	676
Data from US Renal Data System, 2014 ADR Reference Tables D.19 and D.22. <a href="http://www.usrds.org/reference.aspx">http://www.usrds.org/reference.aspx</a>	

should not, begin dialysis. As a general rule, a clinician's judgement combined with formal geriatric assessment tools designed for measuring functional status, frailty, and life expectancy, while taking into account a person's and their caregivers preferences and quality of life, are often the best ways to determine which patients will be reasonable candidates for dialysis.

### Once Dialysis Begins

Because patients on dialysis experience functional decline, and because a higher severity of frailty at dialysis initiation is associated with higher morbidity, monitoring of frail elders on dialysis is important. It ideally consists of a multidisciplinary approach in which clinicians check in on patients regularly. Clinicians should be alert for development of problems such as confusion or overt delirium, unexpected hospitalizations, falls, hypotension,

### TIPS FOR DEALING WITH OLDER ADULTS AND DIALYSIS

- When older adults are being considered for dialysis, assess whether there is potential for benefit. Mortality rates are high and quality of life is poor in patients with multiple morbidities.
- For patients who do undergo dialysis, establish advance directives that include guidance about situations in which the patient would want dialysis discontinued.
- For patients uncertain about whether to start dialysis, consider a three-month trial. At the end of the trial period, patients can decide if dialysis is meeting their expectations and goals. Dialysis can be discontinued if it is not.
- For patients who decide not to undergo dialysis or to discontinue it after it has begun, palliative care should be provided.

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malnutrition, and failure to thrive. Appropriate investigations and treatments should be undertaken if such problems develop.

## Quality of Life on Dialysis

Older adults on dialysis report a lower quality of life than age-matched controls. In particular, those with dementia, multiple comorbidities, and/or a limited life expectancy are unlikely to experience benefit from dialysis.

If dialysis is initiated, the Renal Physicians Association has published a guideline that recommends advance care planning, which should include advance directives, a discussion of future care preferences, and in particular, guidance about situations in which dialysis should be withdrawn.

## Deciding Against Dialysis

Older adults patients who choose not to have dialysis survive for a median of 16 months, and about 33% survive for year past the time when dialysis might have otherwise been indicated. For patients who opt to forego dialysis, the principles of palliative medicine help provide reasonable symptom control and improve quality of life.

## Deciding on a Trial of Dialysis

Older adults who do best with dialysis are those who have had progressive chronic kidney disease and start dialysis in an outpatient setting on a non-emergency basis, with education about dialysis prior to starting treatment. Those more likely to do poorly are those who start dialysis in a hospital setting while being treated for an irreversible acute kidney injury. Their mortality rates are extremely high and quality of life is poor.

For both groups, one approach that can be used is treatment with dialysis on a trial basis. A typical endpoint for a trial is three months. If dialysis treatment it is not meeting the patient's expectations, dialysis can be discontinued.



Patients Undergoing Hemodialysis

## Discontinuing Dialysis

Whether dialysis was started with the intention of long-term treatment, or if was begun on a trial basis, it is useful to have ongoing discussions with patients about whether the risks, benefits, and burdens of dialysis are in line with their expectations and preferences. For some, the answer will be a clear "yes." For others, a decision might be made to discontinue dialysis and begin palliative care.



Peritoneal Dialysis Catheter

## References and Resources

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Images are from the website of the National Institute of Diabetes and Digestive and Kidney Diseases

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## Interprofessional care improves the outcomes of older adults with complex health problems

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