

Home dialysis as the 'first' treatment option for end-stage kidney disease (ESKD)

Background

Chronic kidney disease (CKD) is a long-term health condition of the kidney that lasts for at least three months with evidence of kidney damage and/or reduced kidney function.

End-stage kidney disease (ESKD) is the most severe form of chronic kidney disease, in which there is total or almost total impairment of renal function (i.e. below 10% of normal kidney function).

Burden of disease

Around one in three adult Australians are at increased risk of developing CKD - more than 1.7 million Australians.

The prevalence of CKD and ESKD is projected to rise by up to 80% by 2020 due to ageing population and the rising prevalence of diabetes in Australia.

Cost of treating ESKD from 2009 to 2020 is estimated to cost around \$12 billion to the Australian Government – projected to increase by more than 54% by 2020.

CKD (and ESKD) disproportionately affects individuals in low socio-economic circumstances, particularly Indigenous Australians.

Indigenous Australians, particularly those living in remote areas have a higher incidence of ESKD - around 20–30 times greater than the national average.

Individuals with ESKD need dialysis or a transplant for survival. However, there is a shortage of kidneys available for transplant in Australia (Figure 1).

Home Dialysis

Dialysis is a treatment that uses diffusion and a filter to clean wastes out of the blood. There are two main forms of dialysis: haemodialysis (HD) and peritoneal dialysis (PD).

Dialysis can be conducted at various locations:

- Hospital or "in-centre" units
- Satellite centres
- In the home

Patients who dialyse at home can have the option to dialyse more frequently and/or have longer treatments.

Cost of ESKD associated hospitalisations is over \$1.1 billion annually.

Benefits of home dialysis:

- Better health outcomes (improved mortality and morbidity)
- Better metabolic control
- Better blood pressure
- Reduced dietary and fluid restrictions
- Require less medications
- Improve quality of life
- Ability to return to work
- Remain in their home.

Economic benefits of home dialysis:

- Reducing hospitalisation
- Reducing medication costs
- Reducing loss of productivity
- Reducing transportation costs.

Only around 30% of dialysis is performed in the home

Recommendations

Recommendation 1: Home dialysis as the 'first' treatment option

- Government policies and funding models need to provide equitable access to home dialysis as the 'first' option without favouring for hospital or satellite models - where currently many jurisdictions do not favour home dialysis.
- Incentive payments should be provided to hospitals to maximise home dialysis uptake - minimise in-centre and satellite dialysis.

Recommendation 2: Home dialysis can provide cost savings to healthcare

- Funding models should prioritise treatments that are cost-effective and deliver best patient outcomes for all with ESKD.
- Government funding models need to consider the net cost savings to the healthcare system that can be gained by increasing uptake of home dialysis. An increase in home dialysis utilisation in the next 10 years has been estimated to result in net savings of between \$378 and \$430 million to the Australian healthcare system

Recommendation 3: High out-of-pocket costs for home dialysis

- Financial support on utility costs such as water and electricity usage should be more equitable.
- Funding model should ensure all out-of-pocket costs are identified and reimbursed - including waste removal and additional water and power expenses - should be fully or partially reimbursed.

Recommendation 4: Dialysis treatment by geographical location of residence

- Government funding models should ensure home dialysis services are increased, particularly in rural and remote regions, and that Indigenous Australians with ESKD receive necessary quality care.

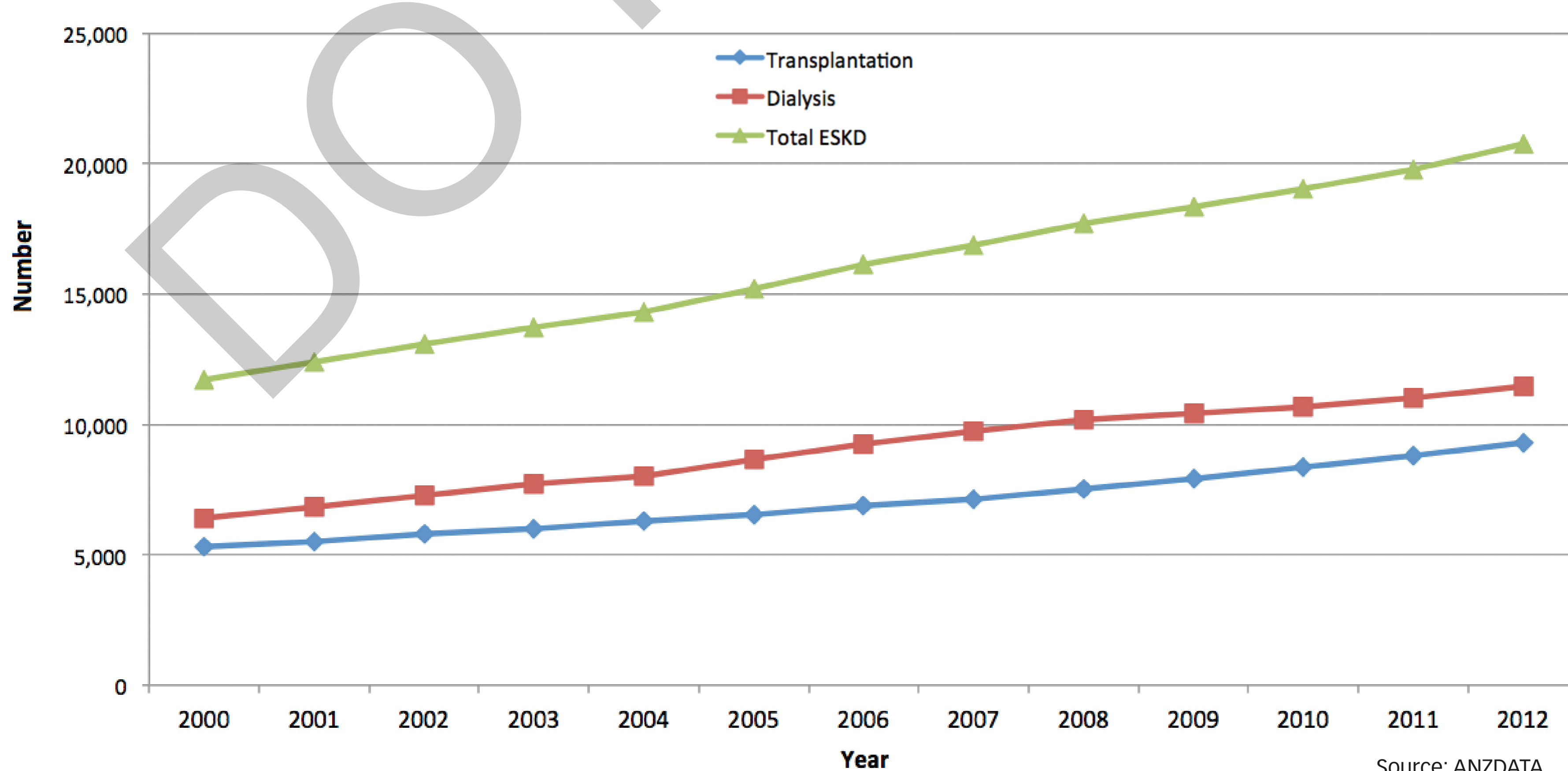
Recommendation 5: Funding framework for renal services - inclusion of new and emerging renal technologies.

- Government strategies to include review and funding processes relating to new and emerging renal technologies that are cost-effective and provide better patient outcome.

For further information and references:

VOT report on home dialysis. Available at: www.mtaa.org.au/about-the-industry/value-of-technology.

Figure 1. Shortage of kidneys available for transplant in Australia



Acknowledgements



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