About dialysis care in New Zealand

A summary of the New Zealand Nephrology Activity Report:

Dialysis care provided in 2014
ABOUT THIS REPORT

This report is for people who receive dialysis treatment in New Zealand and their families and whānau. The report is also for anyone who is interested in the quality of dialysis care provided in New Zealand.

This report summarises the latest information about dialysis care in New Zealand. We compare the results with previous years and national standards. We recommend improvements in care.

The full 2014 report on dialysis care can be downloaded at www.health.govt.nz/nrabreports. This is the first time a summary of this full report has been provided.

In the future, we would like to meet and talk to people treated with dialysis and their families to ask what information they would like to see in this report and the best way to show the information.
Where does the information come from for this report?

Every year patients treated with dialysis or a kidney transplant give information about their treatment to ANZDATA, which is a clinical registry in Australia and New Zealand.

ANZDATA collects information about:

- How many people are treated with dialysis in New Zealand?
- What type of dialysis is used by every patient in New Zealand?
- Whether New Zealand patients receive enough dialysis
- What problems dialysis patients have with infections
- What treatment dialysis patients receive for anaemia
- How many New Zealand patients receive a kidney transplant each year?
- What kind of supportive care is available for dialysis patients?

Why is this report important?

The reasons why New Zealand nephrology teams collect this information is to:

- Understand where dialysis care is good and meets national guidelines
- Show where care needs to be improved
Starting dialysis in 2014

523 people started dialysis treatment in New Zealand 2014. This number has been steady over the last five years although is increasing among older New Zealanders and for Māori and Pacific patients.

Ethnicity among people starting dialysis

There is huge variation in the need to start dialysis based on a person’s ethnicity. For every one New Zealand European or Asian patient starting dialysis, there are about six Pacific patients and four Māori patients who start dialysis on average. The reasons why some patient groups have a much higher rate of starting dialysis needs to be better understood.
Older New Zealanders starting dialysis

326 per million 127 per million
65 years + all ages

Adults aged 65 years and older are the fastest growing age group to start dialysis in New Zealand. 326 patients out of every 1 million older people are treated with dialysis, compared with 127 patients out of every 1 million New Zealanders overall.

Long-term dialysis treatment

Number of people receiving dialysis treatment

2401 2407 2487 2604 2678
2010 2012 2014

Overall, 2678 people received dialysis treatment in New Zealand in 2014. This number is slowly increasing (by about 3% every year). This is similar to the rate of population growth.
Most dialysis patients in New Zealand are treated with haemodialysis at a hospital or satellite (community) centre. About 1 in every 3 dialysis patients are treated by peritoneal (bag) dialysis. About 1 in every 5 dialysis patients are treated by home haemodialysis.
Half of all New Zealand dialysis patients do their dialysis at home using either haemodialysis or peritoneal dialysis. This is much higher than other countries in the world.

The number of people who do haemodialysis at home is staying about the same. One in every five dialysis patients in New Zealand is doing haemodialysis at home.
Vascular access

Haemodialysis uses access to the bloodstream by a plastic tube (catheter) or a fistula (connection of blood vessels in the arm or sometimes the leg).

Fistula use when starting dialysis

The national treatment target says that 50% of patients (about half) should start their haemodialysis treatment using a fistula. Currently only about 1 in every 3 patients (32%) who start dialysis have a fistula that works.

Catheter infections

The national target says the number of patients with dialysis catheters who have a blood stream infection should be less than 4 patients for every 1000 days of a catheter used. In 2014, there was less than 1 blood stream infection for every 1000 days of catheter use which is much better than the target.
Nearly all New Zealand haemodialysis patients have dialysis treatment on at least 3 days of the week. The number of patients who have dialysis treatment more often than 3 times a week is much higher at centres with more patients doing home haemodialysis, as home dialysis is more flexible than hospital dialysis.

The dialysis dose (how much dialysis) measured by the amount of urea that is removed from the blood stream -- called the URR. The higher the URR the higher the dialysis dose (although many dialysis centres don’t measure this in all patients). The percentage of patients who have a higher URR has fallen in 2014 in New Zealand (from 50 in 100 patients to about 1 in 100 patients). The reasons for this change are not clear.
Peritoneal dialysis peritonitis infection

Peritoneal dialysis patients have a dialysis-related infection (peritonitis) once every 28 ½ months (just over one infection every 2 years) on average. This is an average -- some patients have more than one infection during that time – and some have none.

The frequency of peritonitis infections related to peritoneal dialysis has been steadily falling over the last few years. This is similar to the trend in Australian patients, and possibly relates to better clinical training and care.
Anaemia treatment

Guidelines suggests that the aim of anaemia treatment is to keep the blood count below 130 and the patient feeling well.

Currently, 2 in every 3 dialysis patients (65%) have a blood count within these international guidelines.

About 4 out of every 5 dialysis patients in New Zealand are treated with erythropoietin injections under the skin.

Only about 5 in 100 patients are still receiving erythropoietin when their blood count is above 130. This number is falling every year.
Late first specialist assessment

Dialysis is best started after planning with the dialysis team. Ideally, the first specialist assessment happens 3 months or longer before a person needs to start dialysis so that this planning can happen. There are many reasons why a person may not get to see a kidney specialist well before starting dialysis.

In New Zealand, about one in every 6 dialysis patients have a “late first specialist assessment” (that is – they see the specialist for the first time less than 3 months before starting dialysis). The reasons for this are likely to be complex.
Supportive care

Supportive care is offered to:

- People who are choosing not to have dialysis treatment for their severe kidney failure
- People who have difficult symptoms related to their kidney failure
- People who are thinking about stopping dialysis for any reason

In New Zealand, there are big differences around the country in who provides supportive care services both in the hospital and at home. These services are often only just new in some regions. In some hospitals, nephrology (kidney) teams partner with palliative care teams to provide this care.

We hope to be reporting more about supportive care services in future reports.
Recommendations

The findings of this 2014 dialysis report highlight where improvements in dialysis care might be made.

Hospital and community services could:

- Look at reasons for the much higher need for dialysis treatment among Māori and Pacific patients.
- Identify ways to increase access to a dialysis fistula before patients start dialysis.
- Explore ways to help support patients who do dialysis at home. The aim is to support people to give them the best chance of achieving home dialysis.
- Develop more supportive care services for patients and families.
- Support ways for patients to consider and use peritoneal dialysis.
Explaining technical words in this report

Dialysis catheter
A plastic tube permanently sitting in a blood vessel and used for haemodialysis

Clinical registry
A way of collecting information about the clinical care of dialysis patients to measure the performance and quality of care

Erythropoietin
A hormone usually produced by the kidneys to help with the blood count (prevents anaemia). Given as an injection to treat anaemia (low blood count).

Fistula
A surgical connection between blood vessels in the arm or leg and used for haemodialysis.

Haemodialysis
Dialysis done by cleaning the blood stream with a machine. Usually done three times per week for several hours.

Home dialysis
Dialysis done at home by the patient, or a caregiver

Kidney failure
When the kidney function is very low and is helped by dialysis or a kidney transplant.

Kidney transplant
An operation in which a kidney is given by a person with normal kidney function to someone with kidney failure.
Peritoneal dialysis
Dialysis done by putting fluid into the abdomen, several times a day or overnight.

Satellite dialysis
Haemodialysis done in a community building (not hospital or home) usually by dialysis nurses.

Supportive care
Care given to help people who are choosing not to have dialysis or to help with symptoms related to dialysis care.

URR
A measure of the amount of haemodialysis being given done. It is the amount of urea (toxin) removed by haemodialysis during a single treatment.
Where to go for more information

- Kidney Health New Zealand
  
  http://www.kidneys.co.nz/
  0800 543 639

- National Renal Advisory Board
  

- National Renal Transplant Service
  

- Your own dialysis team.

We welcome your views on how we can improve this report. Please contact:

SUETONIA PALMER OR TONYA KARA

Telephone: 03 3640 655

Email: suetonia.palmer@cdhb.health.nz
      tonyak@adhb.govt.nz