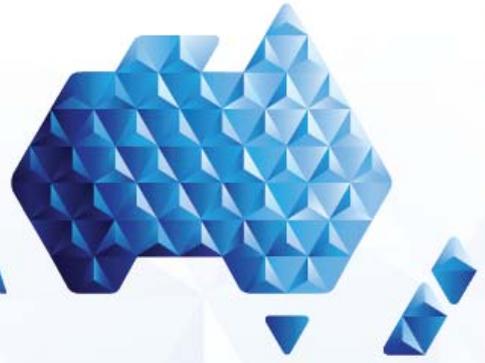


**ANZ
DATA**



Data to 31 December 2016

40TH ANNUAL REPORT

Australia and New Zealand
Dialysis and Transplant
Registry (ANZDATA)

2017

Acknowledgments

ANZDATA Registry offers its most grateful appreciation to everyone who helped make this 40th Annual Report possible, especially the professionals and the staff of all the Renal Units and Tissue Typing Laboratories, upon whose reporting of data this enterprise ultimately depends.

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Coordinating Centre

ANZDATA Registry
Level 4 South
PO Box 11060
South Australia Health and Medical Research Institute
North Terrace
Adelaide, South Australia, 5000

Phone +61 8 8128 4758
Fax +61 8 8128 4769
Email - anzdata@anzdata.org.au
Web - www.anzdata.org.au

ANZDATA Registry Executive Committee

Professor Stephen McDonald - Chair
Professor Stephen McDonald - Senior Executive Officer
Dr Philip Clayton - ANZDATA Registry Editor
Mrs Kylie Hurst - Registry General Manager
Matthew Jose - Current Chair of Steering Committee
Professor Steven Chadban - Past Chair of Steering Committee

Epidemiologist and Biostatisticians

Dr N Khanal - Amgen Fellow in Epidemiology
Dr S Ullah - Senior Biostatistician
Ms A Gulyani - Biostatistician
Dr C Davies - Senior Biostatistician

Administrative and Data Entry Staff

Ms M Kandamby - Data Systems Manager
Mr L Adams - Senior Project Officer
Ms A Farmer - Project Support
Ms C Leitch - Administration
Ms B Martin - Administration
Ms J Adams - Administration
Ms M Danaher - Administration

ANZDATA Registry Steering Committee (2017 Members)

Professor Matthew Jose (Chair)

(Chair ANZDATA Executive)

Professor Stephen McDonald (Executive Officer)

Ms Kylie Hurst (Registry General Manager)

Dr Philip Clayton (ANZDATA Editor)

Ms Monique Borlace (Convenor - Peritoneal Dialysis Group)

Dr Wai Lim (Convenor - Transplantation Group)

Professor Suetonia Palmer (Co-Convenor - Indigenous Interest Group)

Dr Jacqueline Hughes (Co-Convenor - Indigenous Interest Group)

A/Professor Kevan Polkinghorne (Convenor - Haemodialysis Group)

Dr Amelia Le Page (Paediatric Group)

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Dr Lisa Murphy (Kidney Health Australia Representative)

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Ms Kathy Hill (Nursing Representative)

A/Professor Nigel Toussaint (President - ANZSN Representative)

The ANZDATA Registry has great pleasure in presenting the 2017 Annual Report. This is the 40th Annual Report from the Registry and covers data collected to 31st December 2016.

The Report is a result of the involvement of all renal units throughout Australia and New Zealand and reflects enormous time and effort from staff of these units. This is a remarkable record, and testimony to all renal units, nephrologists, renal nurses and other staff throughout Australia and New Zealand. Despite increasing numbers of dialysis and transplant patients, there has been a progressive improvement in data returns, and an increase in electronic submission.

There have been progressive changes in the report format, largely to make more detailed information available in a timely fashion. To this end substantial tabular data is placed online in the Appendices. All the tables and figures are also available from our website in Powerpoint and Excel formats.

Dr Philip Clayton continues as the Editor of the Annual Report. In addition to editing the report, he has overseen the process around rewriting the code to update the analyses and more effectively integrate the process within the Registry. There have been substantial contributions made to the report by various staff members within the ANZDATA Registry. Ms Kylie Hurst, General Manager of the ANZDATA Registry, plays a pivotal role in overseeing the data collection and operations of the Registry. Ms Aarti Gulyani, Dr Chris Davies, Dr Shahid Ullah, our biostatisticians, together with Dr Matthew Sypek (Epidemiology Fellow) have all contributed in significant ways to the content of the report. Many chapters also have specific input from Working Groups. The chairs of these groups in particular make a major contribution to their areas.

Professor Matthew Jose continues in his role as the Chair of the ANZDATA Registry Steering Committee. His enthusiasm and ongoing interest in the Registry and its operations and output are acknowledged.

The members of the ANZDATA Registry Committees and Working Groups are listed on page viii of this report. The Executive gratefully acknowledges the involvement and contribution of these many individuals.

Major funding for the Registry has been provided from the Australian Commonwealth Department of Ageing through the Australian Organ and Tissue Donation and Transplant Authority, Kidney Health Australia and the New Zealand Ministry of Health.

The Registry has been based at the South Australian Health and Medical Research Institute since May 2016; this was a successful move to a supportive environment. In addition to ANZDATA, the operations of the Australia and New Zealand Organ Donation Registry, the Living Kidney Donor Registry and the Eye and Tissue Data Collection are also managed under the same arrangements.

We also gratefully acknowledge industry support which in 2017 consisted of non-tied grants from AMGEN Australia and Astellas. Research funding was also received from NHMRC (as part of a Program Grant to the Beat-CKD consortium).

Stephen McDonald

Executive Officer 2017

Haemodialysis Working Group

Dr Matthew Roberts (Convenor)

A/Professor Lukas Kairaitis
Dr Rathika Krishnasamy
A/Professor Stephen McDonald
A/Professor Nigel Toussaint

Peritoneal Dialysis Working Group

Ms Monique Borlace (Convenor)

Dr Sunil Badve
Professor Neil Boudville
Dr Philip Clayton
Professor David Johnson
A/Professor Stephen McDonald
Dr Kamal Sud

Transplant Working Group

Dr Wai Lim (Convenor)

Professor Steven Chadban
Dr Philip Clayton
Dr Paolo Ferrari
Dr Peter Hughes
Dr Helen Pilmore

New Zealand Working Group

Dr Suetonia Palmer (Co-Convenor)

Dr Tonya Kara
A/Professor Rachel Walker
Dr Michael Collins
Dr Hari Talreja
Dr Andy McNally

Indigenous Interest Group

Dr Suetonia Palmer (Co-Convenor)
Dr Jaquelyne Hughes (Co-Convenor)

Dr Philip Clayton
Ms Donisha Duff
Dr Namrata Khanal
Dr Siah Kim
Dr Paul Lawton
A/Professor Johan Rosman

Paediatric Working Group

Dr Amelia Le Page (Convenor)

Dr Ann Durkan
Dr Lily Johnstone
Dr Tonya Kara
Dr Peter Trnka
Dr Amanda Walker

PROMS Working Group

Dr Rachel Morton (Convenor)

Professor Neil Boudville
Ms Kathryn Dansie
Dr Janak DeZoysa
Professor Matthew Jose
Dr Marie Ludlow
Professor Stephen McDonald
Dr Rajesh Raj
Professor Allison Tong
Dr Suetonia Palmer

Editor

Dr Philip Clayton

Epidemiologist / ANZDATA Registry
Nephrologist
SAHMRI, North Terrace
Adelaide, South Australia, 5000

Contributing Authors

Mrs Aarti Gulyani

Biostatistician
ANZDATA Registry
SAHMRI, North Terrace
Adelaide, South Australia, 5000

Dr Shahid Ullah

Senior Biostatistician
ANZDATA Registry
SAHMRI, North Terrace
Adelaide, South Australia, 5000

Dr Chris Davies

Senior Biostatistician
ANZDATA Registry
SAHMRI, North Terrace
Adelaide, South Australia, 5000

Mrs Kylie Hurst

ANZDATA Registry General Manager
ANZDATA Registry
SAHMRI, North Terrace
Adelaide, South Australia, 5000

Professor Stephen McDonald

Executive Officer, ANZDATA
Nephrologist
SAHMRI, North Terrace
Adelaide, South Australia, 5000

Contributing Authors

Dr Neil Boudville
Head of Department Renal Medicine
Sir Charles Gardiner Hospital,
Nedlands, Western Australia, 6009

Professor Jeremy Chapman OAM
Chairman National Organ Matching System (NOMS)
Director of Medicine & Cancer Services
Westmead Hospital
Westmead, New South Wales, 2145

Dr Jaquelyne Hughes
Nephrologist
Department of Nephrology
Royal Darwin Hospital
Hobart, Tasmania, 7000

Dr Sean Kennedy
Paediatric Nephrologist
Nephrology Department
Sydney Children's Hospital
Randwick, New South Wales, 2031

Dr Wai Lim
Nephrologist
Sir Charles Gardiner Hospital,
Nedlands, Western Australia, 6009

Dr Suetonia Palmer
Nephrologist
Department of Nephrology
Auckland Hospital
Auckland, New Zealand

Associate Professor Kevan Polkinghorne
Nephrologist
Department of Nephrology
Monash Medical Centre
Clayton, Victoria, 3168

A/Prof Germaine Wong
Nephrologist
Westmead hospital
Westmead, New South Wales, 2145

Jenni Wright
Senior Analyst Transplant Systems
Australian Red Cross Blood Service
Alexandria, New South Wales, 2015

Guidelines for Data Release

The policy for release of data to investigators, Renal units and others was revised during 2013 and is summarised on the Website. ANZDATA encourages the analysis, use and citation of its data, and receives many data requests annually which vary in size and complexity. At times these overwhelm the limited resources within the Registry, and must be prioritised. Generally, formal requests for data are preceded by a period of consultation with a member of the Registry staff. Requests are welcome from Renal Physicians, other staff members of Renal Units, Charitable Bodies, Academic Institutions, Government Departments and Industry. Requests dealing with identifiable Hospital data (i.e. data which identifies outcomes of an individual hospital) will only be fulfilled with the explicit consent of the Heads of the relevant Hospital Units. Individual patient identified data (names) is not released.

Attribution of Publications

The policy on attribution of publications which incorporate ANZDATA sourced data was revised during 2002, following a period of consultation with participating physicians.

Where a member of a participating unit has analysed data provided by ANZDATA and subsequently prepared a manuscript, then "ANZDATA Registry" should be acknowledged as a secondary institution in addition to the author's Hospital or University. This applies whether the primary data analysis is performed by the author or by ANZDATA staff. Where the author is an ANZDATA office holder or staff member then the primary attribution should be "ANZDATA Registry".

Where ANZDATA data is only a minor portion of the work, then it may be more appropriate to acknowledge the source explicitly in the "Acknowledgements" section.

In both cases the disclaimer on page ii of this report should be included.

In all cases the source and treatment of the data should be made clear in the "Methods" section. Preferably the abstract (and keywords if applicable) should also include "ANZDATA" which would allow for searching Registry publications.

Suggested Citation

An example of suggested citation for this report is as follows:

.. [Author's name] ..

Peritoneal Dialysis .. [page numbers] ..

ANZDATA Registry Report 2017

Australia and New Zealand Dialysis and Transplant Registry

Adelaide, South Australia.

Editors: Philip Clayton, Kylie Hurst

Publications based upon ANZDATA Registry information reported here or supplied upon request, must include the citation as noted above and the following notice:

The data reported here have been supplied by the Australia and New Zealand Dialysis and Transplant Registry. The interpretation and reporting of these data are the responsibility of the authors and in no way should be seen as an official policy or interpretation of the Australia and New Zealand Dialysis and Transplant Registry.

Privacy Aspects of Data Collection

In December 2001 changes to the Commonwealth Privacy Act were introduced led to changes to the collection of personal information. Essentially these extend to the private sector a number of changes based around 10 “National Privacy Principles” (NPP’s). A detailed exposition of these can be found at the Privacy Commissioner’s website (www.privacy.gov.au). Briefly, however, health information is treated as “sensitive” information, which must usually be collected and handled with consent of the person, unless certain conditions are met. Patients are entitled to view the information the Registry holds about them, and request alterations if the data is thought to be inaccurate.

Each Australian State has also enacted similar provisions which cover practice and patients in public hospitals.

ANZDATA does not release data identifiable by patient name. Results are published/released in tabular or graphic format only. Requests for data are met using deidentified data only. On occasion, when data identifying particular hospitals is involved, consent from the Director of the relevant renal unit is sought prior to the release of information.

ANZDATA spent some time during 2002 formulating an appropriate response to these issues including seeking advice from a variety of sources. The approach taken has been that of a “opt-out” consent, whereby patients are distributed information outlining the nature and purpose of the information collected, offered an opportunity to view that data and ask questions, and the opportunity to request withdrawal of part or all of their data. This approach is that endorsed by the Safety and Quality Commission for Clinical Registries (<http://www.safetyandquality.gov.au/our-work/information-strategy/clinical-quality-registries/strategic-operating-principles-for-clinical-quality-registries/>). To this end ANZDATA has circulated to all participating hospitals a patient information sheet (see opposite), for each hospital to use to inform patients if they wish. Many hospitals have developed their own sheets to meet local needs.

At the time of data collection each unit is asked to certify that they have complied with measures under the relevant privacy measures.

In Australia, tissue typing data and transplant waiting list data are collected in each Tissue Typing Laboratory and entered into the National Organ Matching System (NOMS) database. These data are transmitted to ANZDATA for inclusion in the ANZDATA database and for this Report. In addition to the ANZDATA policies, requests for analyses of waiting list data also require approval by NOMS. New Zealand tissue typing and waiting list data comes from the New Zealand Blood Service (NZBS).

ANZDATA REGISTRY

Australia and New Zealand Dialysis and Transplant Registry

Level 4 South
PO Box 11060
C/- South Australian Health and Medical Research Institute
North Terrace
Adelaide, 5000
South Australia

Phone: (08) 8128.4758
Fax: (08) 8128.4769
Email: anzdata@anzdata.org.au
Web: <http://www.anzdata.org.au>

As part of routine medical care of people receiving treatment with dialysis or kidney transplantation, your kidney specialist collects certain information about the patients they treat. All kidney specialists throughout Australia and New Zealand report this information every twelve months to the Australia and New Zealand Dialysis and Transplant Registry (ANZDATA). ANZDATA collects the information for the purpose of monitoring treatments and performing analyses to improve quality of care for people with kidney failure.

1. What is ANZDATA?

ANZDATA is an organization set up by Kidney Health Australia and the Australia and New Zealand Society of Nephrology to monitor dialysis and transplant treatments. ANZDATA is funded by the Australian and New Zealand Governments and Kidney Health Australia.

2. What information is collected about you?

This information includes your name, age, gender, racial origin, hospital of treatment, some aspects of your medical condition (such as whether you have diabetes) and details about the type of kidney treatment you are receiving (dialysis or transplant).

We **DO NOT** collect details about your address, telephone number, medical insurance, or non-medical matters such as occupation, income, etc.

3. Is personal data ever released?

The identity of people in the database **IS NOT released publicly nor in any reports**. Measures have been put into place to ensure the security of all collected information.

4. What is this information used for?

The information is used primarily for quality assurance, investigating patterns of kidney disease, and planning appropriate health services. We release reports on a variety of topics, including an Annual Report examining the rates and treatment of kidney failure in Australia and New Zealand. We also have a major role in ensuring the quality of patient care by sending to each kidney unit each year a report outlining their activity. These reports also compare the outcome of the treatment they provide with that of other units throughout the two countries.

Reports are also produced at a state and national level, and from time to time analyses are also produced for renal units, government health departments and industry concentrating on particular aspects of renal failure management e.g. peritoneal dialysis, transplantation, haemodialysis.

5. Can you see what personal information ANZDATA collects and the reports that it produces?

Individuals are able to view their own information on request. You can request alterations if you believe it is inaccurate. You may also opt not to have your treatment included in this database, and you should let your kidney specialist know if this is the case. You can also choose not to have some information (eg racial origin) recorded. However, if your information is not included in the Registry, the ability to compare results in Australia and New Zealand or to analyse the results of different treatment methods and for different patient types (eg diabetics) will be compromised.

The national reports and much other material produced by ANZDATA are available free on the Internet at www.anzdata.org.au, or they can be sent to you on request to the address above. Your kidney specialist will also have copies of many of the reports.

If you wish to discuss any of the issues raised here, please let your doctor know or telephone the ANZDATA Registry direct on [08] 8128 4758. You may also write to us (ANZDATA Registry, C/- SAHMRI, PO Box 11060, North Terrace, Adelaide, SA. 5000) or send us an e-mail (anzdata@anzdata.org.au).

Definitions and Methods

A number of definitions given below are used throughout this report unless otherwise stated.

1. Wording

Throughout this report 'treatment' refers to renal replacement therapy, including haemodialysis, peritoneal dialysis and transplantation. In places the word "graft" (or "allograft") is used for kidney transplant.

HD = haemodialysis

CAPD = continuous ambulatory peritoneal dialysis

APD = automated peritoneal dialysis

ESKD = end stage kidney disease

2. Data collection

ANZDATA collects information from all renal units in Australia and New Zealand. Data collection occurs at two time points. Key events (new patients, deaths, transplants) are notified as they occur, with units requested to send this at least monthly. An extensive cross-sectional survey is then performed annually (for data to 31st December). Data submission can occur either via a web-based interface or paper submission. Once the data has been entered it is validated for consistency and to reduce missing values.

For kidney transplants, HLA matching and panel reactive antibodies are obtained direct from the National Organ Matching System. Monthly summaries are distributed to the contributing units. Results contained in this report are based on a final database locked and prepared after the end of year survey returns are received.

3. Inclusion criteria

Included in the Registry are all patients resident in Australia or New Zealand receiving renal replacement therapy where the intention to treat is long-term, i.e. medical opinion is that renal function will not recover. Cases of acute renal failure are excluded. People who move overseas permanently are censored at date of last treatment (or departure in the case of transplant recipients).

4. Modality attribution

For survival analysis the initial mode of dialysis is generally determined at 90 days after first treatment, to allow for early changes and maturation of access. Other transfers (between modalities, or from satellite to hospital haemodialysis etc.) are not analysed if less than 30 days, except for transfers between dialysis centres to which a 60 day rule is applied to allow for holiday movements.

5. Underlying renal disease

This is recorded by the treating hospital according to a modified EDTA coding system (details on back of survey form).

6. Deaths

Death rate is predominantly reported as number of patients died/total number of years of treatment of all patients treated at any time during the year. It is expressed as deaths per 100 patient years (pt yrs) at risk.

7. Comorbid conditions

These are recorded by the treating hospital. No formal definitions are supplied; the treating clinician is asked to record whether the patient has coronary artery disease, chronic lung disease, cerebrovascular disease, peripheral vascular disease or diabetes according to their clinical opinion on a yes / suspected / no basis.

8. Transplant Waiting List

The active transplant waiting list is based on data from the National Organ Matching System (Australia) linked probabilistically with ANZDATA.

9. Derived measures

9.1 Haemoglobin

Haemoglobin is recorded as the last available measurement before the end of the survey period.

9.2 Erythropoietic agents

Erythropoietin agent use is recorded as "yes" if these agents were used at any time during the survey period.

9.3 Iron studies

Iron studies are requested within the last three months of the survey period.

9.4 Estimated glomerular filtration rate

Where glomerular filtration rate is estimated from serum creatinine at entry or post transplantation, the CKD-EPI formula is used: ¹⁹

Females with Cr<=62 micromol/L: $eGFR = (144 + 22 \text{ if black}) \times (Cr/0.7)^{-0.329} \times 0.993^{\text{age}}$

Females with Cr>62 micromol/L: $eGFR = (144 + 22 \text{ if black}) \times (Cr/0.7)^{-1.209} \times 0.993^{\text{age}}$

Males with Cr<=80 micromol/L: $eGFR = (141 + 22 \text{ if black}) \times (Cr/0.9)^{-0.411} \times 0.993^{\text{age}}$

Males with Cr<=80 micromol/L: $eGFR = (141 + 22 \text{ if black}) \times (Cr/0.9)^{-1.209} \times 0.993^{\text{age}}$

Where Cr is creatinine in micromol/L and age is age in years. The correction for “black” race, based on US data, is not applied to any patients.

9.5 Urea reduction ratio / Kt/V

Results are requested in one of these formats, using the stop flow method on a mid-week dialysis. Single pool Kt/V is collected, along with the method used. For conversion of URR to Kt/V urea the formula used [3] is $Kt/V = 0.023 \times PRU - 0.284$ (note that PRU = percent reduction in urea and not URR).

9.6 Body mass index

Body mass index (BMI) is calculated as $\frac{\text{weight (kg)}}{(\text{height (m)})^2}$. The categories used are : underweight <20 kg/m², normal 20-24.9 kg/m², overweight 25-29.9 kg/m², obese >=30 kg/m²

9.7 Peritoneal dialysis measures

These are the standard measures, often calculated by computerised patient management programs.

9.7.1 Residual renal function

The measure used is the arithmetic mean of urea and creatinine clearance from a 24-hour urine collection and serum creatinine and urea.

9.7.2 Peritoneal equilibration test

The ratio of dialysate to plasma glucose is used, following a 4 hour dwell of a 2 litre 2.5% bag of dialysate, performed within 6 months after initiation of peritoneal dialysis.

Rates and Measures

10.1 Incidence rates

Except where otherwise stated, quoted incidence rates are per calendar year, and are expressed per million population.

10.2 Prevalence rates

Except where otherwise specified, prevalence rates are point prevalence rates at 31st December 2017.

10.3 Population denominator

All populations used in this report were stratified by age and sex.

Australian populations were taken from the Australian Bureau of Statistics (ABS) and New Zealand populations were taken from Stats NZ.

All estimated and projected populations used for Australia and New Zealand were for 30 June of each year, and all websites were accessed 27 December 2017 for analysis of the annual 2017 locked dataset.

Estimated population data for each Australian state and territory came from ABS 3101.0 series (4)

Projected population data for each Australian state and territory came from ABS 3222.0 series (5)

Population data for Indigenous Australians were taken from ABS 3238.0(6), using series A for populations after 2011.

Populations serviced by the Greater Southern Area Health Service were estimated by the South Eastern Region of NSW. These estimates were taken from ABS 3235.0(7).

All New Zealand population estimates were taken from Stats NZ Infoshare(8) and population projections were taken from NZ.Stat(9). Maori populations were taken from NZ Infoshare Maori population estimates(10).

Estimates of resident populations by other ethnicities were taken from Stats NZ(11) for years 2013 onwards.

10.4 Death Population Data

All Australian death data were taken from ABS 3302.0 series(12). Death data is not available for publications by age and sex on ABS website for some states. Overall data by states and territory is used. New Zealand death data were taken from NZ Infoshare(8).

10.5 Survival rates

For transplant recipients, survival rates exclude those who were transplanted overseas or were recipients of multiple organ grafts.

Graft survival (unless otherwise qualified) includes both cessation of graft function (ie return to dialysis) and patient death.

Rates for patient survival for fixed periods for transplantation are calculated according to the life-table method and thus include an adjustment to the risk-set of ½ of those censored without failure over the interval to create an “average” risk set.

10.6 Graft survival

For outcomes of kidney transplants, graft failure includes both loss of graft function (i.e. return to dialysis) and death of patients (with graft function). Calculations of patient survival for transplant recipients includes all subsequent modalities (i.e. deaths after graft failure are included). Patients transplanted overseas are excluded from calculations.

10.7 Dialysis Survival

Patient and technique survivals for haemodialysis and peritoneal dialysis are based on the dialysis modality at 90 days after first treatment for patients not transplanted during that period. Patients are followed up until they are either transplanted (at which point they are censored) or until they have a ‘permanent’ change of dialysis modality or until death or most recent follow up date. A ‘permanent’ change of dialysis is defined as any change in excess of 30 days.

Peritonitis survivals are calculated from first peritoneal dialysis (ignoring all earlier treatments) to date of first peritonitis episode. If there were no episodes of peritonitis then calculation is censored at change of treatment from peritoneal dialysis to haemodialysis or transplantation. Peritoneal dialysis includes automated peritoneal and continuous ambulatory peritoneal dialysis. Excluded are patients who had peritonitis before commencing peritoneal dialysis.

10.8 Death and other event rates

Rates are expressed per 100 person years at risk (unless otherwise stated). Some analyses include survival of all patients, others exclude the first 90 days of follow up. This is stated in the individual analyses.

10.9 Age standardisation

All rates are crude, not age-standardised. The age distribution of the populations for Australia and New Zealand can be obtained by contacting the Registry.

10.10 Peritonitis rates

Peritonitis rates are present using episodes of peritonitis reported during periods of peritoneal dialysis - episodes reported prior to commencement of peritoneal dialysis (for example between Tenckhoff catheter insertion and commencement of peritoneal dialysis) are not included in these calculations.

11. Database

Data is stored on a relational database using SQL Server 2012.

12. Statistics

Statistical analyses were performed using Stata version 15.

13. References

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<http://nzdotstat.stats.govt.nz/wbos/Index.aspx#>

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3302.02017?OpenDocument>

Contributing Units

Parent hospitals, transplanting unit and satellite dialysis units together with their state and unit codes are listed below.

In some cases, these have combined as part of a regional network and this is also indicated. The definition of a 'parent hospital' is a pragmatic one, and refers to units which offer a full range of dialysis services (i.e. can commence patients on dialysis, have on-site nephrologist presence and can deal with patients of all degrees of complexity). In contrast, satellite units provide haemodialysis treatments to selected patients, usually with lower staff ratios and no nephrologist on site.

NOTE: The states listed below are in no particular order.

QUEENSLAND (State Code 4)			
PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Bundaberg Base Hospital	BUND	Princess Alexandra Hospital	PSAH
Cairns Base Hospital	CAIR	Queensland Renal Transplant Service	QRTS
Chermside Dialysis Unit (Fresenius)	CHER	Ramsey Cairns Private Hospital	RCPR
Child and Adolescent Renal Service	CARS	Rockhampton Base Hospital	ROCK
Gold Coast university Hospital	GOLD	Royal Brisbane Hospital	RBSH
Gold Cost Private Hospital	GCPR	St Andrew's Private Hospital	GSTA
Greenslopes Private Hospital (Baxter)	GREN	Nambour Selangor Private Hospital	NPRV
Hervey Bay Hospital	HERV	Sunshine Coast University Private Hospital	SCPR
John Flynn Hospital	FLYN	Sunshine Coast University Hospital	SCUH
Mackay Base Hospital	MACK	The Townsville Hospital	TOWN
Mater South Brisbane Hospital	QMAT	Toowoomba Hospital	TWMB
Mater Townsville Hospital	MTOW	Varsity Lakes Hospital	VARL
North Lakes Private Hospital	NLKP	Wesley Private Hospital	WSLY
Pindara Private Hospital	PIND		INNI
SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Atherton Hospital	ATHR	Maryborough Hospital	MARY
Brookwater Dialysis Centre	MBRW	Mater Hyde Park	MHYP
Cairns Home Training Unit	CHTR	Mater Pimlico	MPML
Cairns Private Hospital Satellite	CPRV	Mossman Satellite	MOSS
Caloundra Public Hospital	CAPU	Mt. Isa Satellite	MTIS
Cooktown Satellite	COOK	Nambour General Hospital	NAMB
Dalby Hospital	DALB	Noosa Satellite	NOOS
East Street Self Care Dialysis Unit	EAST	North Lakes Dialysis Unit	NLAK
Gladstone Hospital	GLAD	North Ward Satellite	NWAR
Gold Coast In-centre unit	GCUH	Palm Island Satellite	PISL
Gold Coast Renal Home Therapies	GRHT	Redcliffe Satellite	REDC
Gympie Satellite	GYMP	Redlands Satellite	REDL
Home Hill Satellite	HILL	St Vincent's Robina Satellite	STVR
Innisfail Hospital	INNI	Thursday Island Satellite Unit	THIS
Ipswich Satellite	IPSW	Wickham Terrace Practice	WICK
Kingaroy Satellite	KROY	Woorabinda Hospital	WOOR
Logan Satellite	LOGN	Yarrabah Satellite Dialysis Centre	YRRB
Mackay Home Therapies	MKHT		
TRANSPLANTING UNIT	Unit Code		
Queensland Renal Transplant Service	QRTS		
Princess Alexandra Hospital			
Ipswich Road, Woollongabba 4102			

SOUTH AUSTRALIA (State Code 5)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Flinders Medical Centre	FMDC	Central Northern Adelaide Transplant Service	CNAR
Women's and Children's Hospital	WCHL	Royal Adelaide Hospital	RADL

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Berri Satellite	BERI	Modbury Satellite (Fresenius)	MSAT
Brighton Dialysis Clinic	BRTN	Mount Gambier Satellite	MTGA
Ceduna Hospital	CEDU	Murray Bridge Hospital	MURR
Clare Satellite	CLAR	Noarlunga Satellite	NOAR
Gawler Health Service	GAWL	Payneham Satellite (Fresenius)	PAYN
Hampstead Home Therapies	HMHT	Port Augusta Hospital	PTAG
Hampstead Satellite	HAMP	Port Piri Satellite	PIRI
Hartley Private Hospital (Fresenius)	HART	Queen Elizabeth Hospital Dialysis	QEHD
Port Lincoln Satellite Centre	LINC	Royal Adelaide 2C Haemodialysis Unit	RAHC
Lyell McEwin Satellite	LMCK	Royal Adelaide 7F Haemodialysis Ward	RAHF
Millicent Hospital	MILL	Victor Harbour Satellite	VHAR
Maitland Hospital	MLAN	Whyalla Satellite Unit	WHYA

TRANSPLANTING UNITS	Unit Code	TRANSPLANTING UNITS	Unit Code
Central Northern Adelaide Transplant Service	CNAR	Women's and Children's Hospital	WCHL
Royal Adelaide Hospital		72 King William Road	
North Terrace		North Adelaide 5006	
Adelaide 5000			

WESTERN AUSTRALIA (State Code 6)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Fiona Stanley Hospital	FSTH	Royal Perth Hospital	RLPT
Princess Margaret Hospital for Children	PMHC	Sir Charles Gairdner Hospital	SCGH

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Albany	ALBA	Kalgoorlie Dialysis Unit	KALG
Armadale Kelmscott Memorial Hospital	ARMA	Kimberley Dialysis Centre	KIMB
Bunbury Satellite	BUNB	Kununurra Dialysis Unit	KUNU
Busselton Satellite	BUSS	Midland Private Dialysis Centre (Baxter)	MIDL
Cannington Dialysis Clinic (Diaverum)	CANN	Peel Health Campus	MAND
Carnarvon Hospital	CARN	Port Hedland Dialysis Unit (Pilbara)	PTHD
Coolbellup Home Therapy Clinic	COOL	Rockingham Satellite	RHAM
Derby Satellite	DERB	Spearwood Satellite	SPEA
Fitzroy Crossing Hospital	FICR	Stirling Dialysis Clinic (Diaverum)	STIR
Geraldton Hospital	GRLD	Warbuton Western Desert Dialysis Unit	WBWD
Joondalup Satellite	JOON	Warwick Home therapy Clinic	WARW
Hedland Health Campus	HDLH		

TRANSPLANTING UNITS	Unit Code	TRANSPLANTING UNITS	Unit Code
Princess Margaret Hospital for Children	PMHC	Fiona Stanley Hospital	FSTH
Roberts Road		102-118 Murdoch Drive	
Subiaco 6008		Murdoch 6150	
Sir Charles Gairdner Hospital	SCGH		
Verdun Street			
Nedlands 6009			

NEW SOUTH WALES (State Code 2)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Bathurst Base Hospital	BATH	Mayo Private - Taree	MAYO
Coffs Harbour Hospital	COFF	Newcastle Nephrocare	NCAS
Concord Repatriation General Hospital		Port Macquarie Base Hospital	PTMQ
Dubbo Base Hospital	DUBB	Port Macquarie Private Hospital	PMPH
East Coast Renal Service		Royal North Shore Hospital	RNSH
Prince of Wales Hospital	POWH	South West Sydney Renal Services	SSYD
St. George Hospital	STGH	Liverpool Hospital	LVPL
St. Vincent's Hospital	STVI	Royal Prince Alfred Hospital	RPAH
Sydney Children's Hospital	SCHL	Sydney Adventist Hospital	SADV
Wollongong Hospital	WGNG	Tamworth Hospital	TAMW
Gosford Hospital	GOSF	The Children's Hospital at Westmead	CHWM
Griffith Base Hospital	GRIF	The Tweed Hospital	TWHD
John Hunter Hospital	HUNT	Wagga Wagga Base Hospital	WAGG
Lismore Hospital	LISM	Western Renal Network	
Lismore Private Dialysis Clinic	LPDC	Nepean Hospital	NEPN
Macleay Dialysis Centre - Kempsey	MACL	Orange Hospital	ORAN
Manning Rural Referral Hospital	MANN	Westmead Hospital	WEST
Mater Hospital	MATR		

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Armidale Hospital	ARMD	Liverpool Private Dialysis Centre	LVPR
Auburn Satellite	AUBN	Liverpool Renal Home Therapy Unit	LVHT
Ballina Hospital	BLNA	Long Jetty Renal Unit	LJRU
Bankstown Hospital	BANK	Maitland Hospital	MAIT
Bega Satellite	BEGA	Milton Ulladulla Hospital	MULD
Blacktown Regional Dialysis	BLAK	Mona Vale Satellite	MNVL
Brewarrina Hospital	BREW	Moree Hospital	MORE
Broken Hill Hospital	BROK	Moruya Satellite (Fresenius)	MORU
Campbelltown Satellite	CAMP	Murwillumbah District Hospital	MURW
Concord Repatriation Satellite Unit	CRSU	Muswellbrook	MUSW
Condoblin Hospital	COND	Nambucca Valley Dialysis Unit	NVDC
Cooma Hospital	COOM	Nita reed Community Dialysis Centre	NITA
Coonamble Hospital	COON	Norwest Private Dialysis Centre	NPDC
Cowra Dialysis	COWR	Orange Hospital	ORAN
Deniliquin Hospital	DENI	Penrith Community Dialysis Centre	PCDC
Eora Satellite	EORA	Port Macquarie Community	PCOM
Fairfield Satellite	FAIR	Queanbeyan Dialysis Centre	QBEB
Forbes Hospital	FORB	Raymond Terrace	RAYT
Forster Private Hospital Dialysis Unit	FORS	Riverina Nephrology	RIVN
Gosford Satellite	GOSS	Royal Prince Alfred Satellite	RPAS
Goulburn Satellite (Fresenius)	GLBN	Shellharbour	SHEL
Inverell Satellite	INVR	Shoalhaven Satellite (Nowra)	SHOA
Lakehaven Satellite	LAKE	Singleton Satellite	SING
Lanceley Cottage	LANC	Sutherland Hospital	SUTH
Lindfield Dialysis Clinic — Bbraun	LIND	Sydney Dialysis Centre	SYDC
Liverpool Community Centre	LCOM	Wansey Satellite	WANS
Liverpool Hospital	LVPL		

TRANSPLANTING UNITS	Unit Code	TRANSPLANTING UNITS	Unit Code
John Hunter Hospital	HUNT	Sydney Children's Hospital	NEWC
Newcastle 2304		C/- Prince of Wales Hospital	
		Randwick 2031	
Prince of Wales Hospital	POWH		
Randwick 2031		The Children's Hospital at Westmead	
		Westmead 2145	
Royal North Shore Hospital	RNSH		
St Leonards 2065		Westmead Hospital	WEST
		Westmead 2145	
Statewide Renal Services	SWRS		
Royal Prince Alfred Hospital	RPAH		
Camperdown 2050			
John Hunter Hospital	HUNT		
Newcastle 2304			

VICTORIA (State Code 3)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Alfred Hospital	ALFD	Malvern Dialysis Centre (Fresenius)	MALV
Austin Health	AUST	Monash Medical Centre – Adult	MMCA
Bendigo Hospital	BEND	Monash Medical Centre – Paediatric	MMCP
Diamond Valley Dialysis Clinic (Diaverum)	GDIA	North Melbourne Dialysis Clinic (Diaverum)	NMDC
Eastern Health Integrated Renal Services	EHRS	North West Dialysis Service	NWDS
Epworth Geelong	EPGL	Northern Health Services Melbourne	NHSM
Epworth Eastern Hospital	EPWT	Royal Melbourne Hospital	RMBH
Epworth Richmond	EPWT	Royal Children’s Hospital	RCHL
Forest Hill Dialysis Centre (Fresenius)	FORE	St. Vincent’s Hospital	SVIN
Geelong Hospital	GLNG	Sunshine Priivate Hospital	SNSH
Kew Private Dialysis Centre	KEWP	Western Health	WSTH

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Albury Wodonga Hospital	MANS	Maroondah Satellite	MARO
Angliss Hospital	ALBU	Maryborough District Health Service	MRYB
Ararat Hospital	ANGL	Melton Hospital	MELT
Bairnsdale Hospital	ARAR	Mildura Hospital	MILD
Ballarat Hospital	BAIR	Moorabbin Satellite	MOOR
Box Hill Hospital	BALL	Myrtleford Hospital	MYRT
Broadmeadows Satellite	BOXH	Newcomb Satellite	NCOM
Brunswick Satellite	BRDM	Nhill Hospital Satellite	NHIL
Casey Hospital	BRUN	Northern Hospital	NORT
Casterton Hospital	CASE	Northern Hospital Satellite	NSAT
Caulfield Haemodialysis Centre	CAST	North East Kidney Service	NEKS
Coburg Satellite	CAUL	Orbost Hospital	ORBO
Cohuna Hospital	COBG	Peter James Centre	PJAM
Colac Hospital	COHU	Portland District Health	PORT
Corryong Satellite	COLA	Robinvale Hospital	ROBV
Craigieburn Satellite	CORR	Rosebud Hospital	ROSE
Cranbourne Satellite	CRAI	Sale Hospital	SALE
Dandenong Satellite	CRAN	Sandringham Satellite	SNDR
Daylesford Hospital	DAND	Seymour Hospital	SEYM
Donald Hospital	DAYL	South Geelong Satellite	SGEO
Eastern Health Incentre Dialysis	DONA	St Albans Dialysis Clinic—Fresenius	STAL
Echuca Hospital	EHUB	St. George’s Hospital	SGRU
Edenhope Hospital	ECHU	Sunbury Satellite	SUNB
Epping Dialysis Unit	EDEN	Sunshine Satellite Centre	SUNS
Essendon Fields Satellite Dialysis Centre	EPPG	Swan Hill Hospital	SWAN
Frankston Satellite	ESFS	Terang Hospital	TERA
Goulburn Valley Hospital	FRAN	Wagga Hospital	WAGG
Hamilton Hospital	GVAL	Wangaratta Hospital	WANG
Hastings Hospital	HAML	Waragal Hospital	WARA
Healesville Hospital	HSTG	Warnnambool Hospital	WARN
Heidelberg Hospital	HEAL	Werribee Mercy Hospital	WERR
Horsham Satellite	HEDG	Western Gippsland Hospital	WGIP
Kyabram Satellite	HORS	Williamstown Satellite	WILL
Kyneton Hospital	KYAB	Wodonga Regional Health Service	WDGA
Latrobe Regional Satellite	KYNE	Wonthaggi Hospital	WONT
Lorne Hospital	LATR	Yarawonga District Hospital	YARA
Mansfield District Hospital	LORN	Yarram Hospital	YARM

VICTORIA (State Code 3) cont.

TRANSPLANTING UNITS	Unit Code	TRANSPLANTING UNITS	Unit Code
Alfred Hospital Commercial Road Prahran 3181	ALFD	Royal Children's Hospital Flemington Road Parkville 3052	RCHL
Austin Health Burgundy Road Heidelberg 3084	AUST	Royal Melbourne Hospital 300 Grattan Street Parkville 3052	RMBH
Monash Medical Centre (Paediatric) 246 Clayton Road Clayton 3165	MMCP	St. Vincent's Hospital 41 Victoria Parade Fitzroy 3065	SVIN
Monash Medical Centre (Adult) 246 Clayton Road Clayton 3165	MMCA		

NORTHERN TERRITORY (State Code 1)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Alice Springs Hospital	ALIC	Royal Darwin Hospital	DARW

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Flynn Drive Satellite	FDVE	Palmerston Satellite	PTON
Katherine Dialysis Unit	KATH	Tennant Creek Hospital	TENN
Nightcliff Community Centre	NTCL	Tiwi Dialysis Centre	TIWI

TASMANIA (State Code 7)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Launceston General Hospital	LAUN	Royal Hobart Hospital	RHBT

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Launceston Community Centre Satellite	LCCS	North West Renal Unit, Burnie	NWRU

AUSTRALIAN CAPITAL TERRITORY (State Code 9)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Canberra Hospital	CANB	Access Nephrology	ACSN

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Belconnen Dialysis Centre	BELC	Tuggeranong Dialysis Centre	TUGG
Canberra Community Satellite	CSAT	Yorke Dialysis Centre	YORK
Northside Dialysis Clinic (Fresenius)	NSID		

NEW ZEALAND (Code 8)

PARENT RENAL UNITS	Unit Code	PARENT RENAL UNITS	Unit Code
Auckland City Hospital	AUCK	Starship Children's Hospital	STAR
Starship Children's Hospital	STAR	Taranaki Base Hospital	TARA
Christchurch Hospital	CHCH	Waikato Hospital	WKTO
Dunedin Hospital	DUND	Wellington Hospital	WELN
Hawkes Bay Hospital	HAWK	Whangarei Area Hospital	WHAN
Middlemore Hospital	MIDM	Waitemata	WMAT
Palmerston North Hospital	PALM		

SATELLITE DIALYSIS UNITS	Unit Code	SATELLITE DIALYSIS UNITS	Unit Code
Auckland Dialysis Unit	AHOM	Nelson Hospital	NELS
Bay of Islands Hospital	BAYI	Northshore Hospital	NTSH
Carrington Dialysis	CARR	Rotorua Hospital	ROTO
Gisborne Hospital	GISB	Tauranga Hospital	TAUR
Greenlane Self Care Centre	GLNE	Waitakere Satellite	WAIT
Hastings Hospital	HAST	Waitemata Renal Service	WCDC
Kaitaia Hospital	KAIT	Whakatane Hospital	WHAK
Manukau Satellite	MANU		

TRANSPLANTING UNITS	Unit Code	TRANSPLANTING UNITS	Unit Code
Auckland City Hospital	AUCK	Starship Children's Hospital	STAR
Director - Dr Ian Dittmer		Director - Dr William Wong	
Park Road		Park Road	
Grafton, Auckland		Grafton, Auckland	
Christchurch Hospital	CHCH		
Director - Dr David McGregor			
Riccarton Avenue			
Christchurch			

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