



The CARI Guidelines
Caring for Australasians with Renal Impairment
www.cari.org.au

ANNUAL REPORT
January – December 2004

Parent bodies: Kidney Health Australia, Australian and New Zealand Society of Nephrology
Grants received: NHMRC (Centre of Clinical Research Excellence, 2002 - 2007)
Industry sponsors: Amgen Australia, Janssen-Cilag Pty Ltd
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Report from the Chair

It is a great pleasure to present the first Annual Report of the CARI Guidelines. From the inception of the project in early 1999 following a decision by the Dialysis, Nephrology and Transplant (DNT) Subcommittee to establish local guidelines, activity has grown to include 17 guideline topics and associated Work Groups and Convenors and four individuals who have joined the CARI Guidelines Office.

In setting up the CARI Guidelines, the intention was to provide a set of local evidence-based Best Practice Guidelines with particular relevance for patients with kidney disease in Australia and New Zealand. The primary aim of the guidelines is to provide a sound evidence-based foundation for improving patient outcomes. The first guidelines on dialysis were published in March 2000. We have now set up a solid administrative infrastructure for the organisation which will support future growth. We have a dedicated Senior Project Officer, Denise Campbell, whose job it is to manage the overall activities of CARI, assisted by a part-time Research Officer and a part-time Administrative Officer. In May 2004, we also appointed a part-time Senior Research Officer, Michelle Irving, whose role is to actively pursue the implementation of selected guidelines. The CARI website is hosted by Kidney Health Australia (KHA) and funding for the organisation is also managed by them. We have achieved a relatively secure funding stream from industry that will enable us to support an independent workforce committed to making the CARI Guidelines established, useful and a success. We would like to thank all of the members of the CARI Steering Committee, Tim Mathew and Teresa Taylor at KHA, and Josette Eris, Chair of the DNT Subcommittee, and Aviva Rosenfeld at the ANZSN, for their support and contribution.

We would also like to thank the various Work Group members and Convenors for all their hard work in developing up-to-date guidelines on a wide range of topics. In particular, thanks go to Nicole Isbel, Convenor of the Work Group on 'Urine Protein as Diagnostic Test'; Helen Pilmore, Convenor of the Work Group on 'CMV Disease and Kidney Transplant'; and Kym Bannister, Convenor of the Work Group on 'Evidence for Peritonitis Treatment and Prophylaxis'. These new guidelines were published as a supplement to *Nephrology* in October 2004 and uploaded to the website, which is quite an achievement. We are trying to streamline our processes so that the burden on writers is reduced as much as possible, and to improve the quality of the guidelines we produce by employing a more stringent evidence rating system (based on that of the NHMRC).

We hope this Annual Report shows how much has been done in 2004 and also sets out some of what we plan to do in the future.



Rowan Walker
Chair, CARI Guidelines

History of CARI Guidelines

CARI (Caring for Australians with Renal Impairment) is a national evidence-based project that commenced in 1999 with funding from the pharmaceutical industry. The idea for such a project came from a Dialysis, Nephrology and Transplant (DNT) Subcommittee meeting towards the end of 1998 and work began in earnest in early 1999. The first set of Clinical Practice Guidelines appeared in March 2000. The two bodies responsible for the CARI Guidelines are the Council of the Australian and New Zealand Society of Nephrology (ANZSN) and Kidney Health Australia (KHA), the main organisation supporting research, public education and patient support for kidney disease prevention in Australia.

As with all guidelines, the aim is to improve the quality of health care and improve patient outcomes. Specifically, the aim of the CARI Guidelines is to improve the health care and outcomes of paediatric and adult renal patients by helping clinicians and other health carers to understand evidence-based medicine and to encourage the implementation of the guidelines in practice, as often as possible. It is anticipated that the guidelines will serve as both a valuable educational resource and a means of enhancing the quality, appropriateness, consistency and cost-effectiveness of renal health care. The guidelines were initially developed for use in Australia, have been expanded to include many contributors from New Zealand and to be relevant to clinical practice in New Zealand, and thus we are now keen for them to become regional guidelines.

The CARI process is very demanding of those involved, with the average cycle from guideline start to completion taking about 18 months. All new guidelines are presented at the DNT Scientific Meeting, which occurs every 2 years, and are then revised following feedback from those attending the meeting and subsequent peer review. Our policy is to update and revise all guidelines every 3 years, ensuring that guideline contents are kept relatively up to date. New guideline topics are suggested by the DNT Subcommittee and then reviewed by the CARI Steering Committee, which has 11 members.

The CARI Logo

The CARI logo is a stylised rendering of a pair of koalas sketched for us by the Sydney artist Oliver Watts. It identifies the guidelines as Australian and suggests renal impairment to those up on their koala lore. A healthy koala only drinks a small amount of water, as does someone with kidney disease. Unfortunately, more than 10% of captive and probably the same proportion of wild koalas have kidney disease. Similarly, about 14% of adult Australians have one of two key features of chronic kidney disease.



Activities 2004

During 2004, the priority has been to streamline and improve the CARI processes for developing and updating guidelines based on the best available evidence, to consolidate the office administration, and to publish three guidelines in a supplement to *Nephrology* – on ‘Urine Protein’, ‘CMV Disease’, and ‘Peritonitis Treatment & Prophylaxis’. The revision of the original, second and third sets of guidelines was also commenced, with the aim being to publish them in further supplements to *Nephrology* in 2005. New guidelines on the topics of ‘Kidney Stones’ and ‘Calcineurin Inhibitors in Renal Transplantation’ were also begun, with new Work Groups and Convenors being formed. Draft guidelines from the 2 groups will be presented for comment at the DNT Meeting being held in early March 2005 in Queensland.

A summary of the year's activities includes:

Guideline Methods Workshop

In May 2004, a one-day methods workshop was held at the Qantas Club, Sydney Domestic Airport. A total of 7 guideline writers attended, mainly members of the Work Groups for the 2 new sets of guidelines under development. Assoc Prof Jonathan Craig and Prof Les Irwig from the Dept of Public Health, University of Sydney taught the attendees. The format was part lectures and small group exercises in applying critical appraisal, with a focus on keeping the sessions interactive. Topics included ‘Evaluating randomised controlled trials’, ‘Evaluating systematic reviews’, ‘Applying research data to individual patient care’, and ‘Evaluating clinical practice guidelines’. Feedback on the day was very positive with the suggestion that it be a two-day workshop next time.

CARI Website Redesign

The website is a key tool for communicating the output of the different guideline Work Groups and the activities of the CARI Guidelines project overall. The website was re-designed to make it more user-friendly and attractive and the content was re-organised into more logical categories. Instead of having the guidelines named by Part 1, Part 2 etc, they are now arranged according to disease category. The three categories used are: Chronic Kidney Disease, Dialysis, and Transplantation. There was some discussion about changing the CARI logo to reflect the fact that New Zealand nephrologists contribute to and use the CARI Guidelines, but in the end it was decided to not alter the koala logo but to change the words only to ‘Caring for Australasians with Renal Impairment’. The domain name of the website has also been changed to: www.cari.org.au.

Publication of October Supplement to Nephrology

The guidelines that were presented for discussion at the DNT Meeting in the Barossa Valley in March 2004 were published in a supplement to the journal *Nephrology* in October 2004. The guidelines were on the topics ‘Urine Protein as Diagnostic Test’, ‘CMV Disease and Kidney Transplant’ and ‘Evidence for Peritonitis Treatment and Prophylaxis’. Publication as a supplement to the local nephrology journal means that the guidelines are more accessible to a wider audience than if they were available via the website only.

Preparing New Guidelines for Presentation at DNT Meeting 2005

The two Guideline Work Groups due to present new guidelines at this meeting – ‘Kidney Stones’ and ‘Calcineurin Inhibitors in Renal Transplantation’ – were supported with teleconferences, literature searches, retrieval of articles, slide kits etc. in the lead up to the meeting. Other presenters of revised guidelines such as the Calcium and Phosphate guidelines in the ‘Biochemical and Haematological Targets’ set, were also assisted in their preparation for the meeting.

Implementation: NICS Evidence Uptake Networks Program

In September 2004, the National Institute of Clinical Studies advertised their 'Evidence Uptake Networks Program' and called for Expressions of Interest from existing and new networks interested in including implementation of evidence to their current activities and also groups aiming at improving patient care through the better use of evidence. The CARI network submitted an Expression of Interest, outlining 7 possible areas in the diagnosis and treatment of kidney disease that could benefit from efforts to close the evidence-practice gap. CARI was one of the 11 networks successful in obtaining seed funding under the first phase of the program – which required that each network identify evidence-practice gaps in their area.

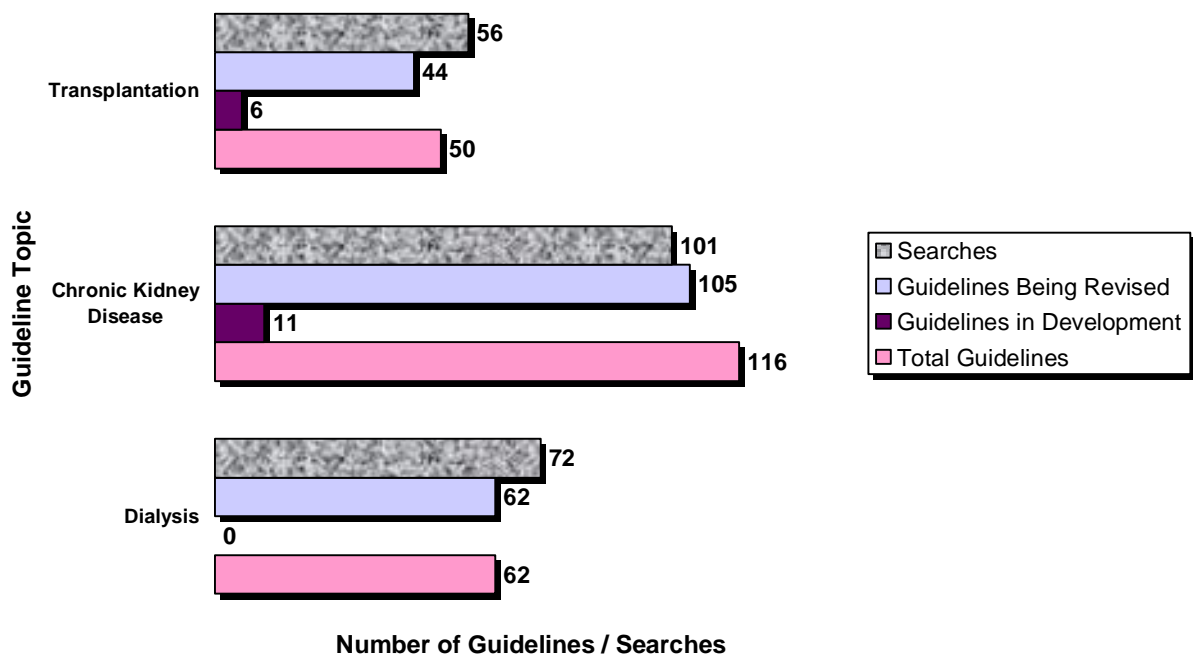
Guideline Implementation Activity: Iron Management Pilot Study

The first stage of the Iron project was completed in 2004. Six renal units were audited around Australia and their Iron Management processes looked at. Iron parameters for each unit were accessed through ANZDATA and results compared with the CARI guideline. Barriers to implementation of the guideline were identified. The data has been compiled and analysed and a paper will be written and submitted to a journal. The next stage of this project will be to engage the 6 renal units and to assist them in implementing any changes that it is agreed are necessary.

Guideline Searches

All Guidelines need to have a systematic current search of the literature performed to ensure that guideline writers have all of the relevant studies on their topic, from which to write their guideline. Devising the search strategy and scanning the search results (to weed out irrelevant studies) is a very time-consuming process. In 2004, the searches for CARL Guideline writers were conducted by the Cochrane Renal Group, which has expertise in this field. The graph below shows that for the 228 guidelines written by the end of 2004, 229 literature searches have been conducted.

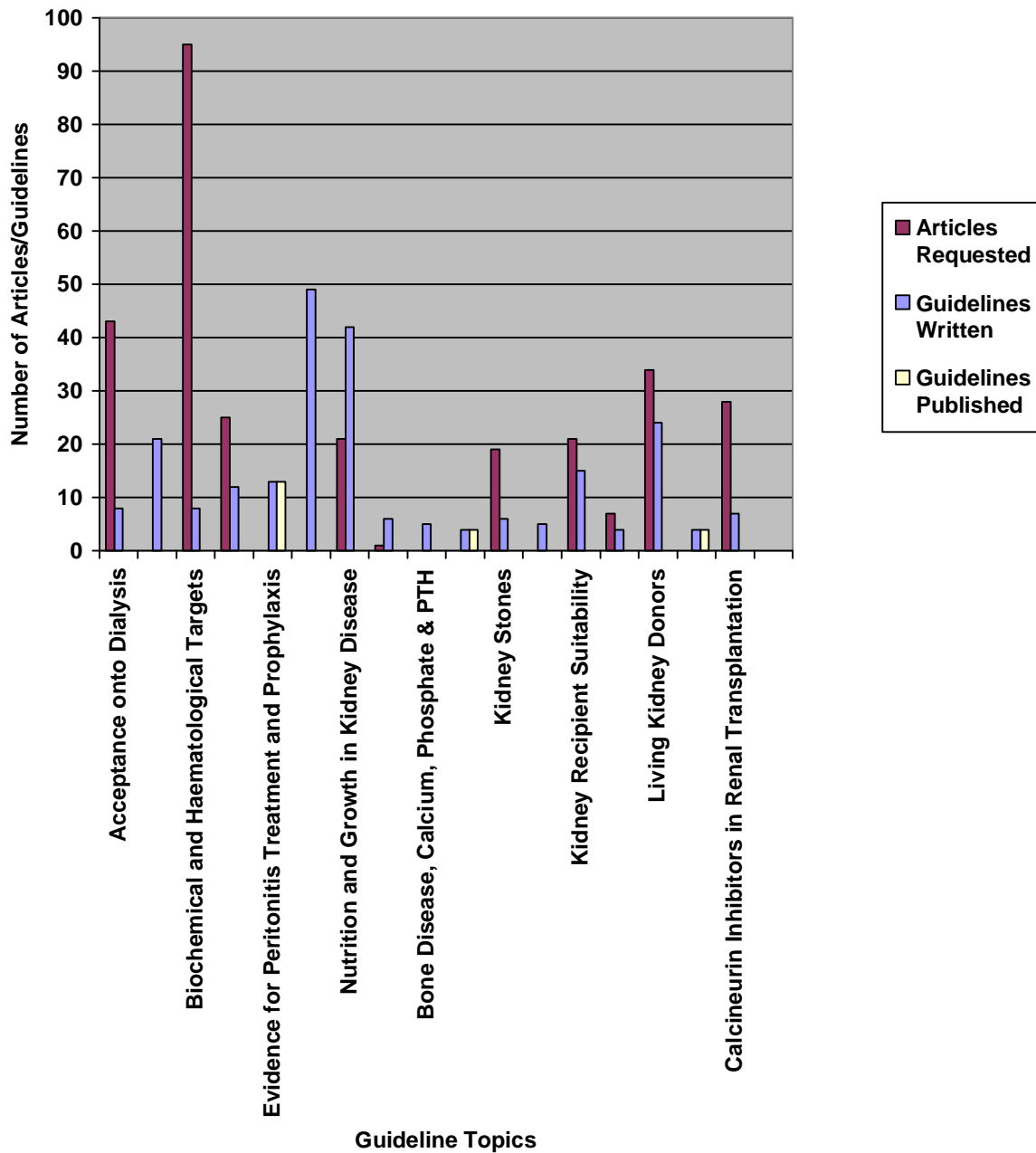
Searches for Guidelines Being Revised & Developed



Requests for Articles

The graph below shows that for the 228 guidelines written by the end of 2004, 294 requests by writers for hard copies of articles had been received and actioned by the CARI Office.

Number of Articles Requested

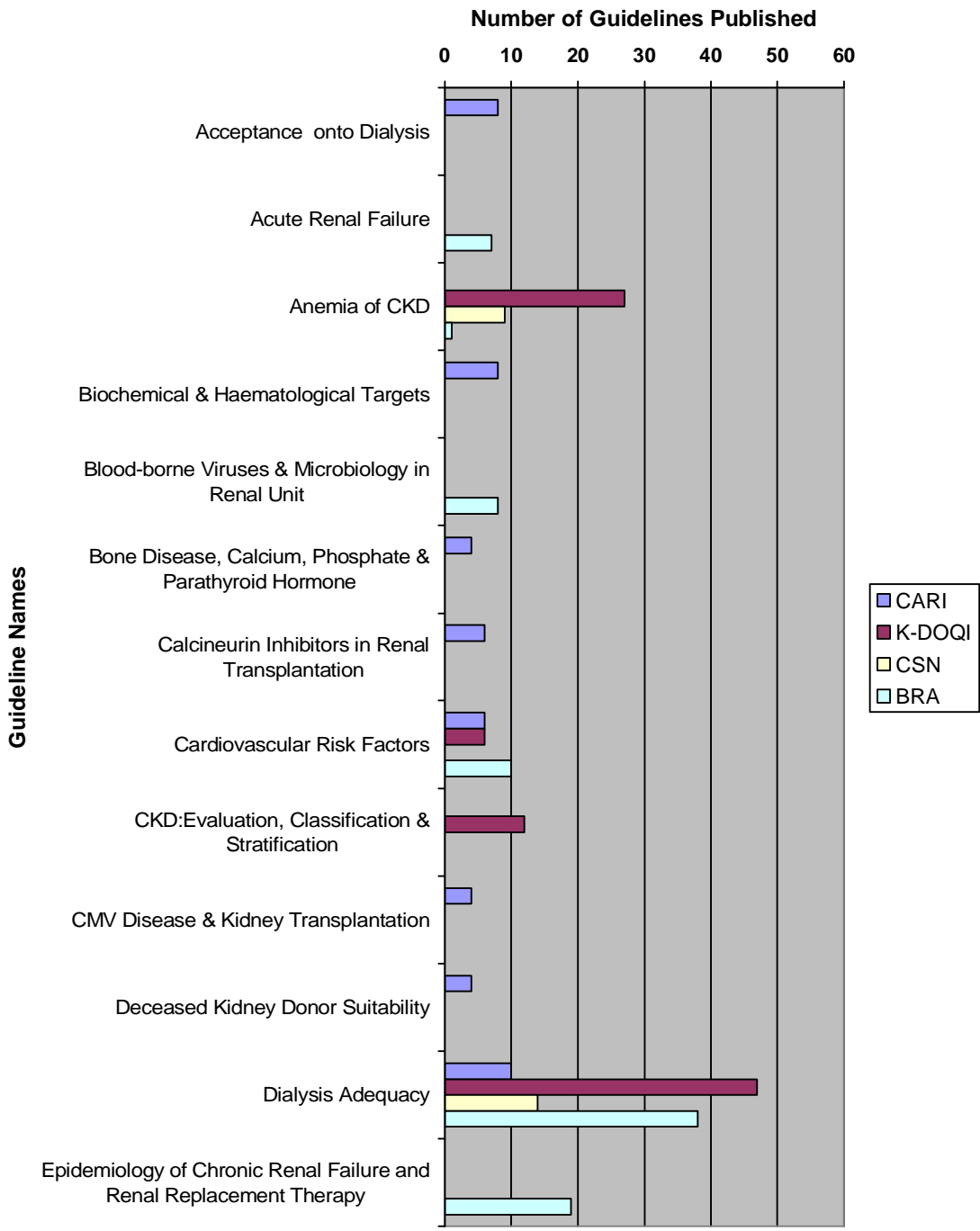


Requests for Peer Review

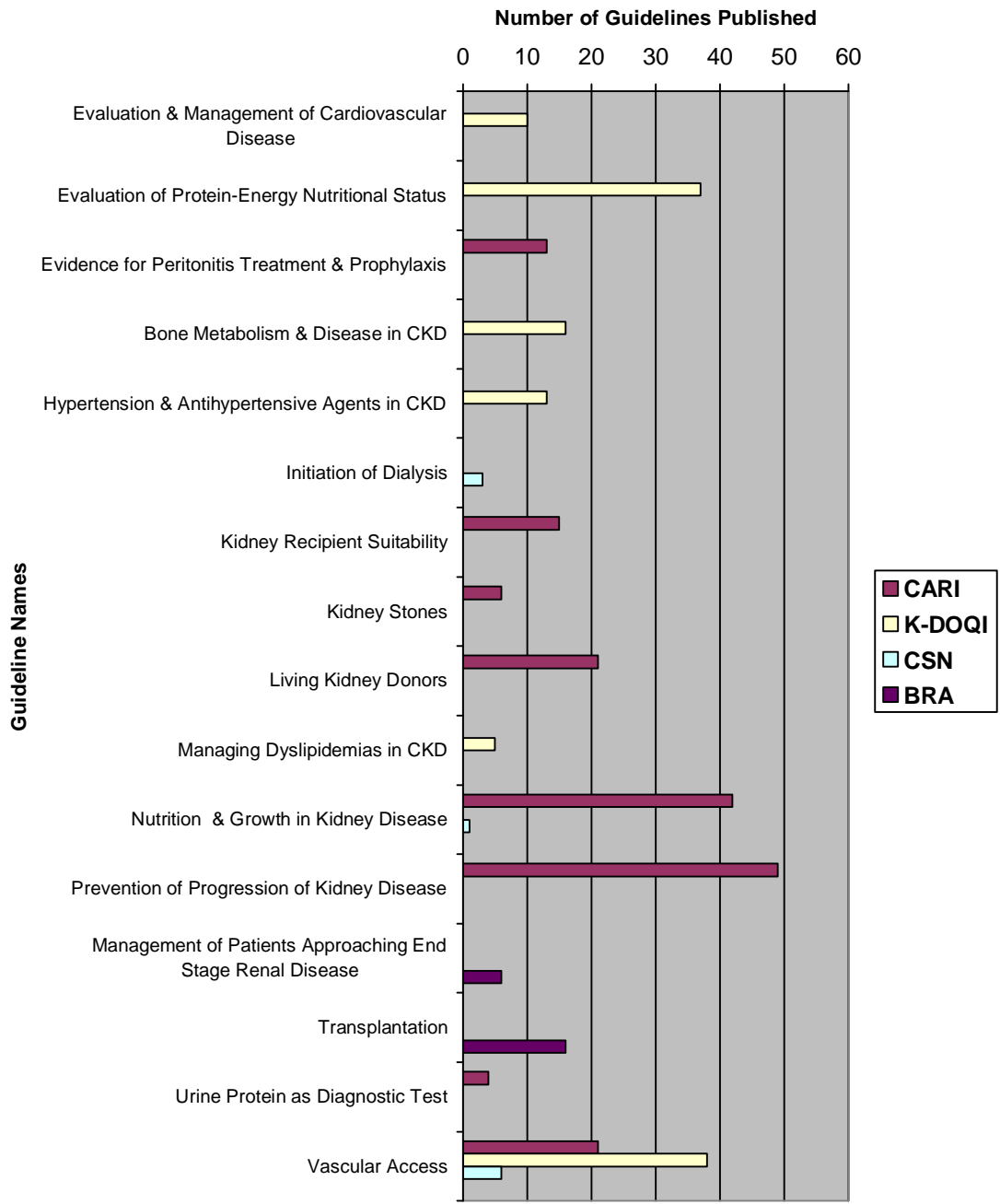
The CARI guidelines aim to provide a summary of the best available evidence and make formal recommendations only when there is good supportive evidence. This means evidence from a systematic review of all relevant randomised controlled trials or evidence from at least one properly designed randomised controlled trial. Part of the quality process involves sending a draft guideline to 3 peer reviewers for their appraisal. A formal checklist with standard critical appraisal questions is sent to them to aid in the review process. Reviewers of the CARI guidelines are chosen for their expertise, either on content and/or methodology.

For the 228 guidelines written by the end of 2004, 18 peer reviewers had appraised guidelines following requests from the CARI Office.

Guideline Topics Covered by CARI/ K-DOQI/ CSN/ BRA



Guideline Topics Covered by CARI/ K-DOQI/ CSN/ BRA

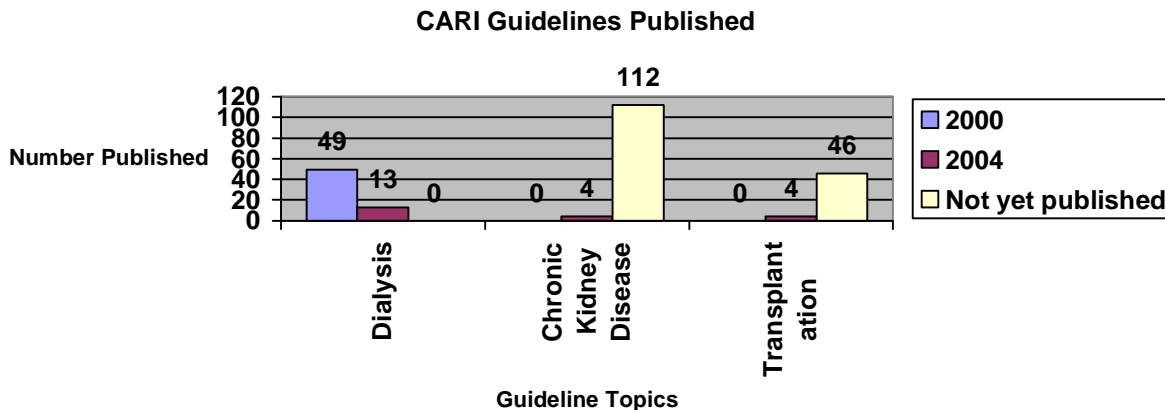


Publications

The first CARI Guidelines were published in March 2000 as an independent publication, with Excerpta Medica Communications as the publisher. The guidelines were all on the topic of dialysis, with subtopics covered being 'Acceptance Onto Dialysis', 'Vascular Access', 'Biochemical and Haematological Targets' and 'Dialysis Adequacy'. There were 49 recommendations in total.

In October 2004, the CARI Proteinuria, Peritonitis and CMV Infection guidelines were published as a supplement to the October issue of *Nephrology*. This began a planned publication schedule of the CARI Guidelines as supplements to future issues of *Nephrology*. There are 2 such supplements planned for 2005 and possibly another planned for 2006. The editorial cycle is for guidelines to be revised every 3 years so that they reflect the findings of the latest evidence.

The graph below shows that of the 228 guidelines written by the end of 2004, 70 had been published in print form, with the balance available via the website. There are plans for the publication of the remainder in print form in 2005–2006.



Meetings

12th Cochrane Colloquium, Ottawa, Canada

The annual Cochrane meeting was attended by Denise Campbell, CARI's Senior Project Officer, with over 1,000 other delegates. The delegates came from Europe, Scandinavia, South Africa, Asia, UK, Canada, US, South America, Australia and New Zealand. The theme of the meeting was "Bridging the Gaps" so many of the plenary sessions, workshops, oral presentations and posters outlined gaps between research and practice and suggested possible solutions.

Many of the presentations are posted on the Cochrane website: www.colloquium.info/2004/

14th Annual Meeting, Australasian Epidemiological Association (AEA), Adelaide, Australia

Fiona Rinaldi, the CARI Research Assistant, attended the Annual Scientific Meeting of the AEA, held in Adelaide in October 2004. Approximately 200 delegates were at the meeting, coming from mostly Australia and New Zealand. The theme of the meeting was Environmental Epidemiology.

This meeting brings together epidemiologists, biostatisticians and public health professionals.

Guidelines International Network (G-I-N) Conference 2004, Wellington, NZ

Michelle Irving, CARI's Implementation Project Officer, attended the 2nd Guidelines International Network Conference in Wellington from 1–3 November 2004, which was hosted by the New Zealand Guidelines Group. The conference had 190 delegates from 25 countries, including Scandinavia, the UK, Western Europe, Asia, Australia, Canada, the US and New Zealand.

The conference focused on getting evidence into action. Health practitioners, guideline developers, policy makers and consumers from 121 organisations and practices were represented.

Dave Davis, who is Director of CME at the new Faculty of Health Science, McMaster University in Hamilton, Canada, set the context for the Conference with a keynote address on '*Evidence in Action: Challenges for the Future*'. This was followed with reports from Australasia, North America, Western Europe and Asia on future challenges for the regions in getting evidence into practice.

CARI Work Group Convenors & Members

Dialysis		
<u>Acceptance onto Dialysis</u> Paul Snelling <i>Co-Convenor</i> John Collins <i>Co-Convenor</i> Gad Kainer John Kelly David Harris Eliza Pearce (lay person) Melissa Stanley	<u>Vascular Access</u> David Francis <i>Co-Convenor</i> Ashley Irish <i>Co-Convenor</i> Greg van Schie Kevan Polkinghorne Tiffany Whittington	<u>Biochemical and Haematological Targets</u> Carol Pollock <i>Co-Convenor</i> Carmel Hawley <i>Co-Convenor</i> Grahame Elder Simon Roger Lawrie McMahon Helen Healy Steven May
<u>Dialysis Adequacy (HD)</u> Peter Kerr <i>Co-Convenor</i> Jim Petrie John Agar Alex Disney Vlado Perkovic Robyn Rogers David Cairns (lay person) David Lawrie	<u>Dialysis Adequacy (PD)</u> David Johnson <i>Co-Convenor</i> Fiona Brown Rob Walker Helen Lammi Sophie Blizzard	<u>Evidence for Peritonitis Treatment and Prophylaxis</u> Kym Bannister <i>Convenor</i> Amanda Walker Maureen Lonergan Charles George Josephine Chow Sandra Simon (layperson) Fiona Brown David Shaw
Chronic Kidney Disease		
<u>Prevention of Progression of Kidney Disease</u> David Harris <i>Convenor</i> Adrian Gillin David Johnson Merlin Thomas Kathy Nicholls Brian Nankivell	<u>Nutrition and Growth in Kidney Disease</u> Carol Pollock <i>Convenor</i> Elisabeth Hodson David Voss Paul Snelling Charles Crompton Bruce Cooper Sheridan Collins	<u>Cardiovascular Risk Factors</u> Rob Walker <i>Convenor</i> Ashley Irish Lawrie McMahon Stephen McDonald Jonathan Craig
<u>Bone Disease, Calcium, Phosphate and Parathyroid Hormone</u> Grahame Elder <i>Convenor</i> Randall Faull Carmel Hawley Pauline Branley Malcolm Cochran	<u>Urine Protein as Diagnostic Test</u> Nicole Isbel <i>Convenor</i> Martin Gallagher Paul Glasziou Cassandra Stone Fred De Looze Stuart McLeod (lay person) Steven McTaggart	<u>Kidney Stones</u> Gavin Becker <i>Convenor</i> Mark Thomas Lukus Kairaitis John Richmond Peter Hughes Greg Malone
<u>Evaluation of Renal Function</u> David Johnson		

Transplantation		
<u>Kidney Recipient Suitability</u> Scott Campbell <i>Convenor</i> Richard Allen Alan Saunder Tim Furlong Andrew Rosenberg Josephine Chow Phil O'Connell Jeff Barbara Mark Cocks (lay person)	<u>Living Kidney Donors</u> Harry Moody <i>Convenor</i> David Nicol Josette Eris Fiona Mackie Rowan Walker Kathryn Kelly (lay person) Richard Robson Mohan Rao	<u>CMV Disease and Kidney Transplantation</u> Helen Pilmore <i>Convenor</i> David Goodman Bruce Pussell Kathy Kable Ann Owen (lay person) Andrew Woodhouse
<u>Deceased Kidney Donor Suitability</u> Debbie Verran <i>Convenor</i> Amanda Robertson Jeremy Chapman Steve Chadban Jim Dellit (lay person) Debbie Gregory Graeme Russ Geoff Dobb Paul Robertson	<u>Calcineurin Inhibitors in Renal Transplantation</u> Paul Trevillian <i>Convenor</i> Toby Coates Matthew Jose Helen Pilmore Mardi Thompson (lay person) Stephen McTaggart Angela Webster Marc Grimer	

CARI Steering Committee

- Rowan Walker (Chair)
Renal Unit
Royal Melbourne Hospital, VIC
- Tim Mathew
Australian Kidney Foundation
Adelaide, SA
- Jonathan Craig
Centre for Kidney Research
The Children's Hospital at Westmead, NSW
- Josephine Chow
Renal Unit
Liverpool Hospital, NSW
- Jim Dellit (lay member)
Department of Education
University of South Australia, SA
- Josette Eris
Department of Renal Medicine
Royal Prince Alfred Hospital, NSW
- Debbie Gregory
GAMBRO Diamond Valley Dialysis Unit
Greensborough, VIC
- David Johnson
Department of Renal Medicine
Princess Alexandra Hospital, QLD
- Stephen McDonald
ANZ Dialysis & Transplant Registry
Queen Elizabeth Hospital, SA
- Paul Snelling
Department of Renal Medicine
Royal Prince Alfred Hospital, NSW
- Denise Campbell
CARI Guidelines Office
Children's Hospital at Westmead, NSW

New Guidelines

Kidney Stones / Calcineurin Inhibitors in Renal Transplantation

The following guidelines were prepared for presentation at the March 2005 DNT meeting on the Gold Coast, Qld. These are scheduled to be published following peer review and feedback from the nephrology community, in the December 2005 issue of *Nephrology*.

The subtopics being covered are:

Kidney Stones

- Clinical diagnosis of kidney stones
- Cystine stones
- Prevention of recurrent calcium lithiasis
- Radiological diagnosis
- Renal stones
- Kidney stones epidemiology

Calcineurin Inhibitors in Renal Transplantation

- Therapeutic monitoring of CNIs
- Adverse effects
- The addition of anti-CD25 antibody induction to standard immunosuppressive therapy for kidney transplant recipients
- Nephrotoxicity of CNIs
- Outcomes related to CNIs
- Pregnancy and lactation
- CNIs in paediatric renal transplantation

Strategic Direction

Over the next few years, CARI will work on the following priority areas:

- Assisting guideline writers to systematically develop guidelines based on a review of the latest and best available evidence
- Disseminating the completed guidelines so that the nephrology community (both local and international) has easy access to them
- Implementing and evaluating the uptake of selected CARI guidelines so that clinical practice and best evidence converge in key areas
- Standardising the procedures for guideline development and revision
- Developing a Code of Conduct for corporate sponsors
- Developing slide presentations and workshop training sessions to help promote the CARI guidelines
- Updating the CARI website to ensure that the content is up to date and accurate
- Enhancing the CARI website to ensure that new content such as that for Consumers/Patients, Dissemination/Implementation, Guideline/Evidence Grading, Electronic Decision Support, and Policy/Process re members/convenors and guideline development/revision is added