The Australian Rural Health Research Collaboration

We gratefully acknowledge the contribution of the NSW Government to the Collaboration through:

NSW Health Research and Development Capacity Building Infrastructure Grant

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The NSW State election was held on Saturday 26th March 2011 and resulted in victory by a large majority to the coalition following 16 years of Labor rule. Christine Robertson MLC had indicated her intention to resign from the chair of the Australian Rural Health Research Advisory council in Spring 2010 and I paid tribute to her contribution in the 2010 Annual Report. It took some time for the new political landscape to emerge and while negotiations took place throughout the year it was not until 2012 that Catherine Cusack MLC was appointed as our new chair. Her report will follow in the 2012 edition.

The year meant transitional roles for three longstand members of our Governing Board. Dr Vahid Saberi took a role as manager of Grafton Hospital and a number of surrounding hospitals; Ms Kim Browne assumed an acting role with the NSW Bureau of Health Information; and Ms Lou-Anne Blunden returned to a health planning role in Sydney. As Directors of Policy, Planning and Performance they provided a valuable service to the Collaboration ensuring that our research was timely and relevant and making a major contribution to the development of research capacity within our footprint, not least the very successful Collaboration research symposiums held in Tamworth, Ballina and Dubbo. During the health service transition in 2011 they supported the Collaboration despite the change and uncertainty and we are very grateful.

In June 2011 we welcomed the appointment of Professor Prasuna Reddy as the new Director of the Centre for Rural and Remote Mental Health in Orange. The position had been vacant since the departure of Professor Brian Kelly to Newcastle in early 2010. Prasuna is a very experienced psychologist with expertise in mental health, chronic disease, health and organisational psychology and is already making a major contribution to the collaboration.

A notable achievement in 2011 was the election of Professor Lesley Barclay as Chair of the Australian Rural Health Alliance which is the peak advocacy body for rural health in Australia. We wish Lesley well in this important position.

In October the Greater West Area Health Service hosted a very successful research symposium in Dubbo. The quality of the biennial research symposium is a good indicator of the growing maturity of the Collaboration since it highlights the impact of research capacity building among rural and remote clinicians. Highlights included the quality of the proffered papers stream and the high attendance at workshops on writing for publication and undertaking a research degree. The symposium included presentations to the CETI research capacity building program graduates and to the best CETI research report in 2011. This is yet another example of successful collaboration and researcher development as we aim to develop a research aware and a research capable workforce.

Members of the Collaboration published research on a variety of issues facing rural and remote Australians. The Australian Centre for Agricultural Health and Safety, widely recognised as a leading international authority, continued to publish data on farm injuries, morbidity and mortality and to provide information on appropriate preventive strategies. Previous successes such as the reduction in deaths due to tractor rollovers have encouraged them to address new threats such as deaths and injuries from quad bike accidents. This work is not without controversy and many opponents have opposed action or been slow to support attempts to prevent injuries.

The Broken Hill University Department of Rural Health saw the publication in international journals of papers on collaboration in primary mental health care and shared care for those with severe mental disorders. At a local level research on the effects of environmental lead was reinvigorated with the development of the multi-agency Broken Hill lead management group.

This short survey shows that the Collaboration was active in building research capacity, addressing issues of serious concern to the rural community and attempting to translate research into action in both policy and practice.

We are as always grateful to NSW Health for our Capacity Building Infrastructure Grant and for their support of the Research Symposium. This year has seen the beginning of a closer relationship between policy makers and researchers and we hope this will benefit both parties.

I would like to thanks my colleagues on the Governing Board and the Advisory Council for their support during an exciting and challenging year.
The Australian Rural Health Research Collaboration is a joint venture of research and health service partners that has been working to build rural health research capacity in NSW since 2002. It is administered through the University of Sydney and comprises:

four rural health research centres:

- The Australian Centre for Agricultural Health and Safety (Moree), University of Sydney
- The Centre for Remote Health Research, University Department of Rural Health (Broken Hill), University of Sydney
- The Centre for Rural and Remote Mental Health, (Orange), University of Newcastle
- The University Centre for Rural Health, North Coast (Lismore), University of Sydney

together with the following NSW Health Service agencies:

- Hunter New England Local Health District
- Western NSW Local Health District
- Far West Local Health District
- Northern NSW Local Health District
- Office of Mental Health and Drug and Alcohol, NSW Ministry of Health
- Clinical Education and Training Institute, Rural Directorate (now Health Education and Training Institute)

The Collaboration receives infrastructure funding from the NSW Health Capacity Building Infrastructure Grants (CBIG) Program. The grant funds research leadership and skills development; data collection and warehousing; methodological skills; PhD student support; website and IT communications; a part time Executive Officer and meeting costs for the Collaboration and its Advisory Council.

Who are we?

Our Partners

- The New South Wales Ministry of Health
- The University of Sydney
- The University of Newcastle
- The people and communities of rural and remote New South Wales
- Members of New South Wales Local Health District Governing Boards
- Indigenous communities
- Peak industry groups such as the New South Wales Farmers Association

Our Vision

Sustained improvement in the health of rural communities through strengthened capacity in research and development.

What do we do?

We  work in close association with our health service providers, industry and community partners to ensure research activities are relevant to needs and findings are incorporated into changed practices. This involves focussing on rural and regional health priorities. We pay close attention to NSW State policies and plans in determining priorities and programs.

We achieve our outcomes by:

- Establishing an effective research partnership between academia, industry, health services and local communities
- Fostering the development of a culture of inquiry and evidence-based practice in health workers
- Building a skilled research-active workforce
- Establishing an effective mechanism for translation of research results into improved health practices
Overview of the Collaboration
Research Centre Reports

Australian Centre for Agricultural Health and Safety

The Australian Centre for Agricultural Health and Safety is part of the Sydney Medical School (University of Sydney). Its aim is to improve the health, safety, and wellbeing of those who live and work on farms. The Centre is the only such organisation in Australia, with core funding received from the Hunter New England Local Health District. Infrastructure funding from the NSW Health grant to the Australian Rural Health Research Collaboration has supported critical aspects of the Centre’s work over the past nine years.

In retrospect, 2011 has been a year of significant challenges for our small Centre (3.2 FTE), as we strive to meet the needs of the agricultural sector to improve health and safety. Information from the National Coroners’ Information System accessed and compiled by the Centre over an extended period has again been pivotal to improvements in on-farm safety and wellbeing. The Centre’s work over the past nine years has contributed to a reduction in on-farm injury fatalities. While subject to final verification, preliminary findings based on coronial data for the period 2007 to 2010 are illustrating continued reductions. These reductions exceed 50% in the past 22 years. In no small part, this is due to the research and evidence base provided by the Centre over an extended period and its ability to translate this research into practice.

The Centre is also commencing a study to investigate cancer in the farming population. Again, this will be an Australian first and will draw on data from a range of sources to examine variations in cancer between farmers, rural residents (non-farm) and urban populations. This study will provide a quantitative baseline to examine an array of factors that may contribute to variations in cancer rates between these populations and is likely to be a sentinel study to further reduce the impact of cancers in farmers.

This brief snapshot of research developments within the Centre would be incomplete without a mention of how such information is translated into practice. This is part of the Sydney Medical School (University of Sydney) and its ability to translate this research into practice. The Centre’s work over the past nine years has contributed to a reduction in on-farm injury fatalities. While subject to final verification, preliminary findings based on coronial data for the period 2007 to 2010 are illustrating continued reductions. These reductions exceed 50% in the past 22 years. In no small part, this is due to the research and evidence base provided by the Centre over an extended period and its ability to translate this research into practice.

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This was the first year of the Centre of Research Excellence in Rural and Remote Primary Health Care and considerable attention was spent in developing this new collaboration with Monash and Flinders Universities and their research centres in Bendigo and Alice Springs. This increased our opportunities to work with leading researchers and our connections with policy makers at the Commonwealth level.

Research continued around three broad themes in 2011: rural mental health care, environmental lead and the rural health workforce. Our contribution to the Australian Rural Mental Health (ARMH) study is described below but important papers were published on primary mental health care and shared care for those with more serious problems. These were collaborations between ourselves, Prof Jeff Fuller lately of the UCRH and Prof Brian Kelly of the CRRMH and the University of Newcastle. These collaborations are important in addressing major challenges to health and healthcare systems. We also completed papers and reports on rural mental health emergency care, models of primary mental health care and the RFDS mental health service.

Broken Hill Centre for Remote Health Research, University of Sydney

It might have been thought that the impact of environmental lead in Broken Hill was a problem that was in decline but it became clear in 2011 that there were still major challenges to be addressed such as the lead levels of indigenous children and incorporating new understandings about the effects of low levels of lead on children and their research centres in Bendigo and Alice Springs. This increased our opportunities to work with leading researchers and our connections with policy makers at the Commonwealth level.

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It might have been thought that the impact of environmental lead in Broken Hill was a problem that was in decline but it became clear in 2011 that there were still major challenges to be addressed such as the lead levels of indigenous children and incorporating new understandings about the effects of low levels of lead on child development. Maintaining a public health program over many years is a challenge and in 2011 researchers, public and environmental health experts, the council and others became more closely engaged in planning and developing existing programs to better address the needs of the community.

Workforce development is a key component of UDRH research and we saw the beginnings of research outputs examining the clinical training of health students and effectiveness of research capacity building interventions. We expect this stream of activity to increase as resources become available.

We were delighted to welcome Sue Kirby from the University of New South Wales as a senior research fellow in November and look forward to her contribution in research and in research capacity development.
The Northern Rivers University Department of Rural Health (NRUDRH) was established in 2001 as a joint venture of the University of Sydney and Southern Cross University supported by the Australian Government Department of Health and Ageing and the North Coast Area Health Service.

In 2010 the NRUDRH evolved into the University Centre for Rural Health, North Coast (UCRH) as a result of the commitment and good will of four Universities and an Area Health Service combining to progress the rural health workforce recruitment and retention agenda. The University of Sydney, along with the Universities of Wollongong and Western Sydney also entered into partnerships with the Commonwealth for ‘long stay’ medical students to be located at the UCRH.

We provide a multidisciplinary centre of excellence in education of students for clinical practice in rural health and conduct research relevant to the health needs of rural communities situated within the Northern Rivers region of NSW and elsewhere. The UCRH undertakes research and research training to improve rural health and build leadership and capacity within the region. Our research focuses on health service priorities in collaboration with policy makers, health system leaders, educators, researchers and clinicians across rural, remote and urban Australia and internationally. We train researchers and support local clinicians in their own research, publish over 40 journal articles annually and currently supervise 13 PhD students, 10 of whom have clinical backgrounds.

The Centre has well-established research streams in maternity care, Aboriginal health, environmental health, mental health, chronic disease and health workforce for rural settings.

Our small team lead a number of NHMRC and ARC grants and participate in others as Chief Investigators. 2011 highlights include:

- NHMRC funding for 3 year project (2012-2014) to provide evidence to guide policy decisions for rural and remote maternity care service provision – ‘The Australian Regional Birthing Index.’
- The mental health and Indigenous research teams combining to develop a pilot study investigating counselling outcomes of Aboriginal and Torres Strait Islanders using action research and formal Cognitive Behaviour Therapy.
- Expansion of the rural health workforce research program and increased collaboration with local rural organisations and a renewed focus on the ageing rural workforce. Projects include: developing strategies and instruments to prolong the working life of older rural GPs and investigating the role of the primary health care Nurse Practitioner in the rural and remote workforce.
- Continuation of our work on factors influencing frequent hospitalisation amongst older people with chronic disease including publication of research on service providers’ perspectives on frequent and/or avoidable admission of older people with chronic disease in rural NSW.

Professor Lesley Barclay
Director, University Centre for Rural Health, North Coast

At the 10th anniversary dinner, our Director Prof Lesley Barclay introduces our previous Director Dr John Beard, via videoconference from Geneva where he is Director of the Department of Ageing and Life Course at the World Health Organization.
The Centre for Rural and Remote Mental Health (CRRMH) is a joint initiative of NSW Ministry of Health and University of Newcastle Faculty of Health. The CRRMH has a strong reputation for leading mental health research, education and service development within rural and remote communities of NSW.

2011 saw a busy and productive year. In July we had the pleasure of welcoming Professor Prasuna Reddy to the position of Director. Professor Reddy joins us from Flinders University as Chair of Rural Mental Health and Director of Research at the University Department of Rural Health. Prasuna is a practising psychologist and has considerable international and Australian experience in related disciplines of health psychology, behavioural medicine, public health research, organisational psychology, and health services research.

The longitudinal Australian Rural Mental Health Study moved into its second phase of NHMRC funding during 2011. The three year follow up survey of a cohort of around 2,000 rural residents was conducted, and a good response rate was received for the genetic component of the study. A new study, the Social Well-being and Engaged Living study, was established in order to address the mental health needs of 12 – 25 year old youth who are at risk of disengaging from education, training or employment. An ultimate goal of this study is the development of an international collaborative clinical trial.

The CRRMH’s Drought Mental Health Assistance Package was rebadged as the Rural Adversity Mental Health Program (RAMHP) to mark its second round of funding. This funding will now take the program through to June 2014. RAMHP undertakes a wide range of activities and strategies designed to improve mental health literacy, reduce associated stigma, link people to services and develop community resilience in rural and remote NSW.

The Farm-Link project, which is funded by the Commonwealth Government under the National Suicide Prevention Program, works to improve access to mental health services for people who live and work on farms. The third phase of the project commenced in 2011 with a particular emphasis on improving access to the right help at the right time for people with mental health problems.

A new and exciting collaboration has been established between the CRRMH and Griffith University to conduct an Australian Research Council funded study investigating influences on farmer suicide in Queensland and New South Wales. While there has been some research focused on the mental health and well-being of farmers and agricultural workers there is limited information on risk and protective factors associated with suicide and suicidal behavior. Developing knowledge of these factors will be important in the design of targeted prevention and intervention practices for farmers and farming communities.

The CRRMH is gaining increasing international recognition for academic leadership in rural mental health and continues to develop both national and international collaborations. The Centre’s programs work to engage with the local rural communities as well as clinical services to ensure relevance and translation into real outcomes for the rural residents of NSW.

The Research and Health System Development Team within the NSW Ministry of Health, Mental Health and Drug & Alcohol Office, supports a coordinated research program for the NSW mental health and drug & alcohol program areas. The Team has a strong commitment to developing a research program that guides and supports high quality research into important issues around mental health and drug and alcohol and welcomes the opportunity to collaborate with, and draw from the broad depth of research expertise available within the Australian Rural Health Research Collaboration.

This was particularly so in 2011, when as part of the implementation of the Mental Health Research Framework, Associate Professor David Perkins led the consultation with ten NSW Universities on behalf of MHDAD. This support provided an opportunity for robust discussion regarding the barriers and enablers for collaboration between academics and services, and resulted in the development of practical strategies to strengthen the links between research centres and services.
Key Objectives

Objective 1: Building Capacity in Rural Health Research

Our goals:

- A stronger role for the Collaboration Advisory Council
- Research leaders leading Centre based programs and research programs participating in leadership development programs
- Research partnerships with health, community and other industry stakeholders
- Building a skilled research workforce by providing:
  - PhD students and clinicians skills in research
  - High quality supervision to postgraduate students
  - Video conferenced research seminar series
  - Relevant graduate courses
- Research skills development through a series of workshops including biostatistics, application of health economics to policy, and translation of research findings
- Hosting the Rural Health Research Colloquium
- Supporting health professionals undertaking rural clinical placements including Public Health Officer trainees

Clinical Education and Training Institute, Rural Directorate (now Health Education and Training Institute, Rural Directorate)

The NSW Rural Research Capacity Building Program (RRCBP) is a novice research development program for experienced rural health workers hosted by the Rural Directorate of the Health Education and Training Institute. The program has been running for seven years and continues to rely on partner organisations such as ARHRC to provide teaching (twice annually) and ongoing mentorship for research program candidates. Candidates find the expert input invaluable to the development and undertaking of their research.

Overall, 124 candidates have been accepted into the program, in 6 intakes. Fifty candidates have finalised program requirements, and 39 have given conference presentations (including 5 international conferences.) Nine peer-reviewed journal articles have been published, and 31 candidates (25%) have withdrawn from the program.

Publishing in peer reviewed journals is an important aspect of knowledge exchange and translation, but is daunting for first time researchers. The RRCBP used a structured approach to break writing a paper into a series of steps undertaken during teleconferences, as homework tasks and with a series of writing buddies over a six week period. Ten places were offered in boot camp. All ten participants completed boot camp with a manuscript in draft form. Evaluations showed that participants rated their boot camp experience highly and would recommend it to others. Nine weeks after the completion of boot camp, half of the participants had submitted their manuscripts to peer-reviewed journals.

For some RRCBP candidates, their research experience inspires them to undertake research-related postgraduate studies. Current and past candidates are enrolled in PhDs (7 candidates), Masters by research (5), and post graduate coursework (3).
Dr Helen Stain, CRRMH, continued to oversee the support network for the first six months of 2011. During that time, preparations were under way for the Research Colloquium, to be held in Dubbo in October, and the network continued to meet by teleconference on an occasional basis although activities were circumscribed due to Dr Stain assuming other responsibilities within the Centre.

In July, Dr Carlie Lawrence was appointed to a postdoctoral position within the CRRMH and also commenced as Network coordinator, with continued assistance from Helen Stain. Thanks to Dr Lawrence’s enthusiasm, it was possible to resume regular teleconferences, and to provide other forms of assistance such as providing a web forum for researchers. Dr Lawrence undertook an environmental scan for resources and training requirements that would provide a platform for planning activities in 2012.

The following publications had resulted from the ARMHS study at December 30, 2011:


**Published 2010**


The ARMHS study is the Collaboration flagship project. It is led by chief investigators from each research centre under the direction of Professor Brian Kelly.

This longitudinal study is providing important information on the unique characteristics of rural communities that impact on the mental health and wellbeing of residents.

At the close of 2011, the third wave of data collection was nearly complete and the genetics samples ready for analysis. Discussions were also being held about fostering active research collaborations with Aboriginal communities and researchers which has the potential to provide both ARMHS and the ARHRC with exciting opportunities for the future.

A data management contract with the Clinical Research Design IT and Statistical Support (CReDITSS) Unit of the University of Newcastle is working successfully.

2011 also saw the launch of a valuable collaboration with the Hunter Community Study (HCS). This collaboration provides an urban cohort using key measures from ARMHS to aid comparison between urban and rural/remote samples.

The team continues to be busy with data analyses and publication writing. Amanda Green successfully completed her Masters of Psychology (University of Sydney) with her research using ARMHS data (Green 2011 et al.) Five other journal articles dealing with aspects of the ARMHS study were published during 2011, and two more are in press at the time of writing.

The following publications had resulted from the ARMHS study at December 30, 2011:

**Published 2011**

Ninety three delegates attended the 4th Rural Health Research Colloquium, held at the RSL Club in Dubbo, in October 2011. The Colloquium was hosted by the Greater Western Area Health Service, in collaboration with the Clinical Education and Training Institute, Rural Directorate (CETI), with assistance from the Collaboration. The conference attracted participants from across the health sector including allied health, as well as a number of universities and health service organizations across rural New South Wales. Although final numbers were lower than in previous years, those attending were enthusiastic about their experience. The energy level amongst presenters and audience was high for the duration of the conference, and most were extremely keen to see the gathering continue in future as an opportunity for newer researchers to present and discuss their work.

Major sponsorship was provided by the NSW Department of Health, CETI, and the Australian Rural Health Research Collaboration.

Keynote speakers included Dr Stefan Graybowskki from the University of British Columbia, Vancouver in Canada, who spoke on ‘The sustainability of rural health services: Building on what we have learned through studying small maternity services in Canada.’ Other keynote speakers included Prof John Humphreys from the Monash University School of Rural Health, who has earned an international reputation for work on sustainable rural health services and Assoc Prof Melissa Haswell-Elkins from the School of Public Health and Community Medicine at the University of New South Wales, who addressed the conference on ‘Pathways to care for mental health and social and emotional wellbeing in remote areas.’ Assoc Prof Geoff Morgan from the UCRH North Coast, a key partner of the Collaboration, spoke on ‘Spatial assessment of social and environmental risk factors for health – NSW examples’ and presented findings from research into frequent hospital admissions of older people with chronic disease.

A highlight of the Conference dinner was the awards ceremony for graduates of the Rural Research Capacity Building Program conducted by CETI. All graduates are to be congratulated on presenting their work as part of the Colloquium. In particular, Dona Powell deserves mention for a qualitative study into the experiences of night shift nurses in regional public hospitals, which received an award for ‘Best Report.’ In 2012, the ARHRC Colloquium and the allied health conference organised by CETI will be combined in a single event, the Rural Health and Research Congress, to be held in Wagga Wagga in November.

Health Services Research

Much of the Collaboration’s research is undertaken in collaboration with health services and is designed to improve access to those services. The Mental Health Emergency Care project examines how the use of tele-health technologies can support services in rural and remote locations which have poor access to specialist advice and assistance.

Work with the Royal Flying Doctor Service is intended to improve primary health care service models for remote residents and studies of rural and remote maternity services aim to improve access to safe birthing services in rural communities.

The GP Farm Toolkit brings together a wide range of research knowledge to improve mainstream primary health care for those who live and work on farms.
Mental Health Research

Mental Health Research is a key part of the Australian Rural Health Research Collaboration.

The Collaboration’s Flagship project, the Australian Rural Mental Health Study, is coordinated by the University of Newcastle’s Centre for Rural and Remote Mental Health. In 2011, a three year follow up survey was conducted on a cohort of around 2000. Despite growing concerns about the wellbeing of people living in rural Australia especially in times of drought and other adversity, there are significant gaps in understanding the mental health needs of people adapting to such changes. Examining changes over a longer period of time is vital to understanding the development and outcomes of mental health problems and the impact on individuals, families and communities. The Australian Rural Mental Health Study will fill a significant number of these gaps. The combined effort of Collaboration members with active participation by the health district mental health directors will make major contributions to our understanding for years to come.

The research program of the CRRMH has continued to focus on two streams of research throughout 2011, namely, Clinical research and Population Health research. The focus of the Clinical research stream is on child and youth mental health and builds upon a strong track record.

Research addressing primary mental health care models included the assessment of a primary mental health care service provided in a small rural town (Perkins 2011) and major reviews of the international evidence for collaboration in mental health care (Fuller 2011a,b) and for shared care of those with severe mental health conditions (Kelly 2011).

James Bennett-Levy continued to contribute to the psychological evidence base as an editor of The Oxford Guide to Imagery in Cognitive Therapy and conducted courses on cognitive therapy training throughout 2011 which attracted participants from across Australia.

Agricultural Health

Significant programs of work in 2011 by the ACAHS have included the first national study into the health and safety needs of small area farmers in Australia. The Centre also continued its leadership role on the issue of quad bike safety, with quad bikes now being the leading cause of on-farm non-intentional injury deaths outranking tractors by a ratio approaching 2:1.

The critical area of child safety was reinforced through a national TV campaign and release of related resource materials focusing on Safe Play Areas on farms. Subject to funding availability it is hoped to extend this program of work with an expansion not just to farms, but also rural residential areas. Other programs approved and due to commence shortly include the human exposure study on preparations of mouse baits and an assessment of cancer risk in farmers drawing on data from the 45 and Up Study in NSW.

At Broken Hill, the Research Centre provided advice to the Royal Flying Doctor Service on alternatives to traditional service models that could see significant changes in the delivery of health care to people in remote communities. The Centre has a solid relationship with the RFDS, founded on a common interest in improving health outcomes for rural and remote residents. Further discussions on the project are expected in 2012. In 2011, the Broken Hill Centre for Remote Health Research presented new service models to RFDS senior management.

The Research Centre also continues its involvement in an evaluation of the Mental Health Emergency Care Rural Access Program which aims to reduce the burden of unnecessary travel for treatment on people experiencing mental illness.

Remote and Indigenous Health

Aboriginal health remains a strong focus of much of the research conducted through the University Centre for Rural Health. Currently, the Centre supports two Indigenous PhD students and is consolidating research relationships with local Aboriginal medical service providers.

Research projects include providing evidence to guide policy decisions for rural and remote maternity care – ‘The Australian Regional Birthing Index.’ A five year funded project in the remote Top End targets the year before and the year after birth in Aboriginal children in remote areas.

A doctoral student is exploring the experiences and perceptions of Aboriginal haemodialysis patients in the North Coast area. Another project combines our mental health and Indigenous teams with a pilot study investigating counseling outcomes of Aboriginal and Torres Strait Islanders using action research and formal Cognitive Behaviour Therapy.

The ‘Supporting Mums to Quit’ project, described in the 2010 Annual Report, is developing and evaluating a smoking cessation program for pregnant Aboriginal women.
Health and the Workforce
The health workforce research program at the University Centre for Rural Health has grown significantly in the last 12 months with increasing collaboration with local rural organisations. The Centre undertook a systematic review of the evidence to increase the rate of involvement of GPs in research, and is developing strategies and instruments to prolong the working life of older rural GPs. It is also investigating the role of the primary health care Nurse Practitioner in the rural and remote workforce, and how to recruit and retain the rural allied health workforce, and the possible role of Rural Allied Health Assistants.

In addition, the UCRH is looking at the ageing workforce in general, to investigate pathways to healthy workforce participation and care giving, and the impact of medications on that workforce. The Centre is also investigating the notion of professionalism in medical education as delivered in intensive clinical experiences.

Researchers in Broken Hill are examining strategies to strengthen the rural health workforce through innovative clinical placement programs for medical, nursing and allied health students.

Environmental Health
Work on the effects of air pollution on health has been enhanced by Geoff Morgan’s role as a Chief Investigator on a recently funded NHMRC Centre of Research Excellence Grant. The UCRH is also collaborating on a project funded through the Cooperative Research Centre for Spatial Information to investigate the relation between service provision for cancer, cancer incidence and survival. This project will develop and implement statistical techniques for assessing outcomes with small numbers of events and the methods refined in this project are especially relevant for assessing the effects of service provision on a range of health outcomes in regional areas. These projects consolidate and expand the UCRH’s expertise in spatial epidemiology and health services research. A/Professor Morgan continues to coordinate the Environmental Health Unit of the Master of Public Health at the University of Sydney.

At the same time, Broken Hill continues to build its profile in lead research. Earlier work looking at the number of children screened for elevated blood lead levels highlighted a number of concerns for the community, principally with the method used for screening. A second important issue was the fall in number of Aboriginal children attending for screening.

In 2011, Frances Boreland presented findings of an evaluation of the ‘finger-prick’ screening method introduced in response to community concerns, at the Rural Health Research Colloquium in Dubbo, while Susan Thomas a trainee Public Health Officer on placement in the Centre prepared a report on improving access to, and outcomes of, blood lead screening for Aboriginal children in Broken Hill. Both projects directly benefit the community through the Lead Program. This is especially important at a time when national guidelines on safe blood lead levels are under review, with serious implications for communities affected by lead.

Objective 3. Translation of Research into Improved Health Policy and Practice
Our goals:
Practitioners, policy makers and researchers working together
- Joint workshops/ seminars involving researchers and health service personnel
- Practitioners and policy makers co-investigators on research projects
- Nomination of research leaders to policy and decision-making boards and committees
- Reporting research in appropriate and accessible forms

Reporting in peer-reviewed publications
- Reports accessible on the Collaboration website
- Reporting in conference presentations and reports including dedicated themes in the biennial Rural Health Research Colloquium
- Reporting in media releases
- Reporting to policy makers
- Reporting as practice guidelines

Supporting evidence-based practice in rural health services
Fostering the development of a culture of enquiry and evidence-based practice
The Collaboration’s peer-reviewed papers fit with NSW health research priorities as shown in the following table:

<table>
<thead>
<tr>
<th>NSW Health priority</th>
<th>No. of papers Published</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Make prevention everybody’s business</td>
<td>19</td>
</tr>
<tr>
<td>2. Create better experiences for people using health services</td>
<td>5</td>
</tr>
<tr>
<td>3. Strengthen primary health and continuing care in the community</td>
<td>8</td>
</tr>
<tr>
<td>4. Build regional and other partnerships for health services</td>
<td>3</td>
</tr>
<tr>
<td>5. Make smart choices about the costs and benefits of health services</td>
<td>13</td>
</tr>
<tr>
<td>6. Build a sustainable workforce</td>
<td>8</td>
</tr>
<tr>
<td>7. Be ready for new risks and opportunities</td>
<td>4</td>
</tr>
<tr>
<td>8. Epidemiology of disease</td>
<td>10</td>
</tr>
<tr>
<td>9. Other, including methods</td>
<td>7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>77</td>
</tr>
</tbody>
</table>

Evidence of Performance

Evidence of Performance

Occupational Therapy Private Practice in Regional and Remote Australia
Broken Hill Centre for Remote Health Research

Our research aimed to understand how occupational therapy private practices work in regional and remote areas of Australia and how practices can be viable, given the difficulties in running successful businesses in these areas. We surveyed private occupational therapy practices in outer regional, remote and very remote Australia. Results indicate that while most Occupational Therapists provide services in at least three towns, there are no private OT practices based in very remote towns, and some specialised or resource-intensive services are not available. About half of respondents worked in home-based sole employee practices and were planning to leave private practice within the next five years. Few had any small business training before starting private practice. Nearly all believed their practices were viable, but nearly one third considered them unsustainable in their present form.

Respondents commonly reported inadequate reimbursement for services provided in distant locations or workplaces as travel is not funded by Medicare. Difficulty in attracting experienced staff also limited practitioners’ ability to grow their business and expand services to their localities.

This research raises a number of issues. First, it may be useful to recognise rural practice as a specialist area of practice. Secondly, including travel costs in the Chronic Disease Management rebate through a payment for services provided other than in consulting rooms would contribute to the sustainability of private practice. Thirdly, extending Medicare tele-health arrangements to include services such as occupational therapy home assessments, would support a greater range of services. Finally, combined allied health practices that use a decentralised business model and offer flexible employment, opportunities for team practice and professional development may assist occupational therapists to have a viable private practice and provide much-needed services in regional and remote areas.
Reducing Admissions for Chronic Conditions
University Centre for Rural Health, North Coast
and
North Coast Local Health District

Some hospital admissions are considered potentially ‘avoidable’ - that is, hospital admission may not have been required with improved primary health care. Rates of admissions that are considered potentially avoidable are higher in rural and remote areas of Australia. However, little is known about the underlying causes and factors contributing to individual admissions, particularly in rural and remote areas. To better understand potentially avoidable hospitalisation, the UCRH in collaboration with the Local Health District and the Divisions of General Practice undertook studies with patients and service providers.

A scoping study of local service providers explored their perceptions of the factors that contributed to potentially avoidable admissions for patients with chronic disease. They reported barriers such as the complexity of the patient’s condition, the lack of services, poverty, and rurality, as well as the person having difficulty accepting their health status.

We surveyed patients who had more than three admissions in one year and found that they tended to be older than 75 years, admitted to hospital around five times a year, have multiple co-morbidities, and high levels of psychological distress and social isolation. Most patients felt their admission had not been ‘avoidable’ on the day.

With these results, we piloted a tool designed to predict a potentially avoidable admission when used by the patient’s senior admitting doctor and nurse. This tool is a fundamental component of recent competitive funding proposals to continue our work in this area.

Improving Farmers’ Hearing
Australian Centre for Agricultural Health & Safety
and
Hunter New England Local Health District

The Hunter New England Local Health District through the efforts of nurse audiometrist Kathy Challinor and other NSW Health colleagues, have worked in collaboration with ACAHS to improve the hearing health of the farming population. This has involved the compilation of data from hearing screenings conducted over the past 26 years at field days throughout rural NSW.

During this period over 8,000 participants have been screened with data published by the Centre in the International Journal of Agromedicine illustrating an improvement in the proportion of those with ‘normal hearing’ by 14.7% in right ears and 12.5% in left ears.

Importantly, this program of work is the largest sample of data on farmers in the world and is the first study to ever demonstrate a reduction in new cases of noise induced hearing loss in farmers.

In short, the results of the work are of major international significance. While we always aspire to ‘make a difference’ it is sometimes difficult to gauge our impacts on such a long-term issue as noise injury. This research clearly demonstrates the value of this long-term screening and prevention program and is an exemplary illustration of best practice in translational research.
Appendix 1. Staff and Scholars 2011

Research-active staff

Australian Centre for Agricultural Health and Safety
Assoc Professor Tony Lower
Assoc Professor Lyn Fragar
Ms Julie Depczynski
Ms Emily Herde
Ms Teresa Munro
Mr John Templerley

Assoc Professor Lyn Fragar
Adjunct-Associate Professor
Senior Lecturer (to June 2011)
Research Officer NFIDC
Research Assistant
Program Leader

Broken Hill Centre for Remote Health Research
Professor David Lyle
Assoc Prof David Perkins
Dr Margaret Lesjak
Mr Paul Bennett
Ms Frances Boreland
Ms Helen Cameron
Ms Michele Daly
Ms Naomi Gough
Ms Susan Kirby
Ms Judith Merritt
Ms Emily Saumur
Ms Susan Thomas

Professor David Lyle
Head, University Department of Rural Health
Director, Centre for Remote Health Research
Epidemiologist/ Senior Lecturer
PHC Health Education Officer
Research Officer & Education Coordinator
Senior Research Officer (June-December 2011)
Research Officer (part-time)
Public Health Registrar (from November 2011)
Senior Research Fellow (from December 2011)
PHC RED Rdy/ Allied Health Academic
Research Officer
NSW Public Health Trainee (until September 2011)

University Centre for Rural Health, North Coast
Professor Lesley Barclay
Assoc Professor James Bennett-Levy
Assoc Professor Geoff Morgan
Assoc Professor Janelle Stirling
Mr Hudson Birden
Dr Jo Longman
Dr Megan Passey
Dr Sabrina Pit
Dr Margaret Rolfe
Dr Judy Singer
Dr Gao Yu
Ms Frances Barraclough
Ms Deborah Donoghue
Ms Therese Dunn
Ms Kathy Heathcote
Ms Sheila Keane
Mr Jem Mills
Ms Liz Rix
Ms Lindy Swain
Ms Shahar Bar-Zeev
Ms Malinda Steenkamp
Ms Jennifer Gale
Dr Shawn Wilson
Ms Sheila Keane
Ms Jennifer Gale

Professor Lesley Barclay
Director, University Centre for Rural Health
Mental Health Academic
Deputy Director, UCRH, Environmental Epidemiologist
Aboriginal Health Academic
Senior Lecturer - Education
Research Fellow
Senior Lecturer - Primary Health Care Research
Post-Doctoral Fellow
Biostatistician
Rural Development Clinician
Research Fellow
Clinical Education Academic
PhD Scholar / Research Fellow
Data Manager / Analyst
Research Fellow - Epidemiology
Allied Health Academic
Mental Health Academic
PhD Scholar / Research Associate
Pharmacy Academic
PhD Scholar / Research Associate
PhD Scholar / Research Associate
Research Assistant
Research Fellow
Allied Health Academic
Research Assistant

Centre for Rural and Remote Mental Health Research
Professor Prasuna Reddy
Dr Helen Stain
Dr Clare Coleman
Dr Katie Douglas
Dr Tracy Robinson
Mr Daniel Bowen
Mr Bruce Middleton
Ms Lauren Anthes
Ms Jennifer Green
Mr Danny Hills
Ms Emily Killen
Dr Carlie Lawrence
Ms Rebel Lindsay-Egan
Mr John McClinton
Ms Kristy Payne
Ms Georgia Pollard
Ms Anne Tonna
Ms Jacqui Wilson
Ms Anna Whitton

Professor Prasuna Reddy
Director
Program Leader (Research)
Senior Project Coordinator, ARMHS
Project Officer (Research)
Senior Lecturer, Education
Research Assistant
Service Development Program Leader
Research Assistant, ARMHS
Project Officer, SHIP
Lecturer, MHEC Program
Research Assistant, ARMHS
Project Officer (Research)
Research Assistant, ARMHS
Education Officer
Project Officer, MINT
Research Officer
Executive Officer (Development)
Senior Research Assistant
Project Officer, SWEL
Appendix 2. Publications

Peer-reviewed Journal Articles

- Agricultural Health and Safety

- Environmental Health

- Health Services Research
• Health Workforce


Fraga L, Dzepcynski J. Beyond 50: Challenges at work for older nurses and allied health workers in rural Australia: a thematic analysis of focus group discussions. BMC Health Services Research 2011; 11: 42.


• Mental Health


Saurman E, Perkins D, Roberts R, Roberts A, Patfield M, Lyle D. Responding to mental health emergencies: implementation of an innovative telehealth service in rural and remote NSW, Australia. The Journal of Emergency Nursing Published online 2011 DOI:10.1016/j.jen.2010.11.005


Books and book chapters


Other


Graph 2. Number of peer-reviewed publications and book chapters by research centre 2001-2011
Appendix 3. Presentations

**Agricultural health**


Herde E. Reducing farming fatalities in Australia - a positive story but more to come. National Rural Health Alliance Conference. Perth, 13 - 16 March.

Herde E. Safe play areas on farms - preventing child drowning. Sustaining Rural Health Through Research. 4th Rural Health Research Colloquium. Dubbo, 11 - 13 October.


Lower T. Farmers health – where to now? Sustainable Rural Communities Conference. Narrabri, 5 April.


**Health Services Research**


**Environmental Health**

Boreland F. Lead and health in Broken Hill. Invited presentation to Mining Related Councils Meeting, Council Chambers, Broken Hill, 13 May.


Morgan G. The health effects of bushfire smoke in Australia. Research Symposium – Bushfire Smoke Issues. Invited Speaker. Centre for Ecosystem Management, Edith Cowan University, Perth, April

Morgan G. Symposium on behalf of the NSW Department of Environment, Climate Change and Water, on Air Pollution Economics. Invited participant. Annual Conference of the Australian Agricultural and Resource Economics Society. Melbourne, 8 - 11 February.


**Health Workforce**


Mills J. The role of Mental Health Academies with the University Departments of Rural Health in Australia: Increasing access to rural services and supporting Mental Health Workforce development. 3rd Rural and Remote Mental Health Symposium. Ballarat, November.


Smith T, Keane S, Lowe S, Campbell N, Lincoln M. A Survey of Medical Radiation Professionals: A Subset of the Combined Allied Health Workforce (CAHW) Study. 8th Annual Scientific Meeting of Medical Imaging & Radiation Therapists. Adelaide, 14 - 17 April.

In Indigenous and rural/remote health


Wilson S, Stirling J, Bennett-Levy J, Nelson J. Building an Aboriginal and Torres Strait Islander mental health toolkit through Action research and formal training in CBT. Coalition for Research to Improve Aboriginal Health. 3rd Aboriginal Health Research Conference. Sydney, May.

• Mental Health


Gill D, Kearins D. Rural Service Networks: developing community resilience and capacity in the face of rural adversity. 3rd Australian Rural & Remote Mental Health Symposium. Ballarat, 14 November.


Hart C. NSW Health Rural Adversity Mental Health Program [RAMP]. Mental Health Association of NSW Conference. Sydney, 1 – 2 June.


Limbrick M. Bringing ‘Burnt’ to the Bush – Partnering with the Sydney Theatre Company (STC) to deliver mental health promotion in rural NSW. 14th NSW Rural Mental Health Conference. Cooffs Harbour, 22 - 24 June.

Limbrick M. Bringing ‘Burnt’ to the Bush – Partnering with the Sydney Theatre Company (STC) to deliver mental health promotion in rural NSW. 3rd Rural and Remote Mental Health Symposium. Ballarat, 14 November.


Barclay L. The role of the Midwife as a key to safe effective maternity care and how this role can be employed in rural and remote areas of low income countries. Invited presentation, Plenary session. International Conference on Allied Health Sciences. Kuala Lumpur, Malaysia, 22 - 24 July.


AUSTRALIAN RURAL HEALTH RESEARCH COLLABORATION

Statement of Income & Expenditure (Summary)

For the period 1st January 2011 to 31st December 2011

<table>
<thead>
<tr>
<th>Income</th>
<th>625,000</th>
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<tbody>
<tr>
<td>Grant Income received</td>
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<tr>
<td>Interest on Grant funds</td>
<td>5,287</td>
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<td>Balance from previous period</td>
<td>133,527</td>
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<tr>
<td>Total Income</td>
<td>763,814</td>
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</table>

<table>
<thead>
<tr>
<th>Expenditure</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Business Unit</td>
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<tr>
<td>Business Manager</td>
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<tr>
<td>Meeting Costs</td>
<td>7,641</td>
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<td>Reports/Publications</td>
<td>7,143</td>
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<tr>
<td>Communication workshops</td>
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<tr>
<td>Identifying support</td>
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<td>ACAHS - Moree</td>
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<td>Research Leadership</td>
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<td>Researchers-academic qualifications</td>
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<td>Development programs</td>
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<td>Methodological support</td>
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<td>NRUDRH - Lismore</td>
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<td>Researchers-academic quals</td>
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<td></td>
<td>100,000</td>
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<td>BHUDRH - Broken Hill</td>
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<td>Communication workshops</td>
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<td>Building Community partnerships</td>
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<td>108,028</td>
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<td>CRRMH - Orange</td>
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<td>Research Leadership</td>
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<tr>
<td>Development programs</td>
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<tr>
<td>Methodological support</td>
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<tr>
<td>Communication workshops</td>
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<tr>
<td>Building Community partnerships</td>
<td>51,856</td>
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<tr>
<td>Total Expenditure</td>
<td>437,558</td>
</tr>
<tr>
<td>Surplus / (Deficit) as at 31/12/11</td>
<td>326,256</td>
</tr>
</tbody>
</table>

1 Includes $125,000 invoiced for the Jan-March 2012 period
2 Includes a $20,000 commitment from 2010 for the development of new service models for the RFDS
3 Invoice outstanding at 31st December 2011

Graph 3. Numbers of presentations by ARHRC partners 2004-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>ACAHS</th>
<th>UCRH</th>
<th>Broken Hill</th>
<th>CRRMH</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>120</td>
<td></td>
<td></td>
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<tr>
<td>2005</td>
<td>100</td>
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<td>2007</td>
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<td>2008</td>
<td>40</td>
<td></td>
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<td>2009</td>
<td>20</td>
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<td>2010</td>
<td>10</td>
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<tr>
<td>2011</td>
<td>5</td>
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</table>
### Appendix 5. Grants and Consultancies

<table>
<thead>
<tr>
<th>Peer-reviewed projects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agricultural health</strong></td>
</tr>
<tr>
<td>Adoption of Quad Bike Rollover Prevention Devices</td>
</tr>
<tr>
<td>Farmer Cancer Study</td>
</tr>
<tr>
<td><strong>Environmental health</strong></td>
</tr>
<tr>
<td>Spatial-temporal modelling of cancer incidence, survival and mortality</td>
</tr>
<tr>
<td>Understanding and ameliorating the human health effects of exposure to air pollution: from knowledge to policy and public health practice</td>
</tr>
<tr>
<td><strong>Health services</strong></td>
</tr>
<tr>
<td>Centre for Research Excellence (CRE) for accessible and equitable primary health service provision in rural and remote Australia</td>
</tr>
<tr>
<td>The development of a composite index of need for regional maternity services: The Australian Regional Birthing Index</td>
</tr>
<tr>
<td>An evaluation of existing vertically integrated training practices at North Coast General Practice Training</td>
</tr>
<tr>
<td>Maternal health services for remote dwelling Aboriginal women and infants from the Top End of Australia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non peer-reviewed projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nimbin Integrated Services Project Evaluation</td>
</tr>
<tr>
<td>Development of an action research design and implementation plan for a men's specific low intensity psychological support service.</td>
</tr>
<tr>
<td><strong>Mental Health</strong></td>
</tr>
<tr>
<td>Pilot study for a randomized controlled trial of a primary care based intervention to support lifestyle change for people with high cardiovascular risk.</td>
</tr>
<tr>
<td>Travel grant for World Psychiatric Association Congress, Buenos Aires, Argentina.</td>
</tr>
<tr>
<td>Beck Institute Scholarship.</td>
</tr>
<tr>
<td>Influences on Farmer suicide in Queensland and New South Wales</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>To develop and deliver course “Allied Health Assistants: Supervision and Delegation.”</td>
</tr>
</tbody>
</table>
### Appendix 5. Membership of Professional Societies, Boards and Committees

<table>
<thead>
<tr>
<th>Boards, Councils and Policy-making Committees</th>
<th>University of Australia Clinical Placement Advisory Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Pesticides and Veterinary Medicines Authority Community</td>
<td>Universities Australia Clinical Placement Advisory Group</td>
</tr>
<tr>
<td>Consultative Committee</td>
<td>Member</td>
</tr>
<tr>
<td>Farmall Australia</td>
<td>John Templeray</td>
</tr>
<tr>
<td>Farmall Australia</td>
<td>John Templeray</td>
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<tr>
<td>Farmall Australia</td>
<td>John Templeray</td>
</tr>
<tr>
<td>Farmall NSW</td>
<td>John Templeray</td>
</tr>
<tr>
<td>Workover NSW Rural Solutions Working Group</td>
<td>John Templeray</td>
</tr>
<tr>
<td>Royal Australasian College of Surgeons Rural Trauma Sub-Committee</td>
<td>Julie Depczynski</td>
</tr>
<tr>
<td>Australian Water Safety Council</td>
<td>Emily Herde</td>
</tr>
<tr>
<td>Farmall Australia</td>
<td>Tony Lower</td>
</tr>
<tr>
<td>Farmall NSW</td>
<td>Tony Lower</td>
</tr>
<tr>
<td>Trans-Tasman Quad Bike Working Group</td>
<td>Tony Lower</td>
</tr>
<tr>
<td>Workover NSW Industry Reference Group</td>
<td>Tony Lower</td>
</tr>
<tr>
<td>Cancer Institute NSW - NSW Skin Cancer prevention Advisory Committee</td>
<td>Tony Lower</td>
</tr>
<tr>
<td>Australian and New Zealand Neonatal Network Advisory Committee</td>
<td>Deborah Donoghue</td>
</tr>
<tr>
<td>NSW PHC RED Advisory Committee</td>
<td>Deborah Donoghue</td>
</tr>
<tr>
<td>Health and Unfused Gas Heaters Study – Technical Advisory Committee</td>
<td>Geoff Morgan</td>
</tr>
<tr>
<td>Sydney Medical School Population Health (formerly Community Doctor Theme) (US) Public Health Leadership Institute</td>
<td>Hudson Birden</td>
</tr>
<tr>
<td>Center for Health Intervention and Prevention (CHIP), University of Connecticut</td>
<td>Hudson Birden</td>
</tr>
<tr>
<td>Centers for Disease Control &amp; Prevention Syndemics Prevention Network, Public Health Service, US Department of Health &amp; Human Services</td>
<td>Hudson Birden</td>
</tr>
<tr>
<td>Sydney University Senior Executive Group: Community Engagement Committee</td>
<td>Lesley Barclay</td>
</tr>
<tr>
<td>Universities Australia Health Workforce Working Group</td>
<td>Lesley Barclay</td>
</tr>
<tr>
<td>World Health Organisation Patient Safety Virtual Global Discussion Forum</td>
<td>Lesley Barclay</td>
</tr>
<tr>
<td>Northern Rivers General Practice Network: Board</td>
<td>Lesley Barclay</td>
</tr>
<tr>
<td>Health Workforce Australia. National Advisory Committee for Higher Education and Training Sector</td>
<td>Lesley Barclay</td>
</tr>
<tr>
<td>Northern NSW Local Health Network. Governing Council</td>
<td>Lesley Barclay</td>
</tr>
<tr>
<td>Northern NSW Local Health Network. Health Quality Committee</td>
<td>Lesley Barclay</td>
</tr>
<tr>
<td>Pharmacological Society of Australia</td>
<td>Lindy Swain</td>
</tr>
<tr>
<td>Services for Australian Rural &amp; Remote Allied Health (SARRAH) Advisory Committee</td>
<td>Lindy Swain</td>
</tr>
<tr>
<td>NSW PHC RED Advisory Committee</td>
<td>Megan Passey</td>
</tr>
<tr>
<td>Australian Physiotherapy Association (APA). NSW Neurology Group</td>
<td>Stian Harris</td>
</tr>
<tr>
<td>Rural and Remote Allied Health Research Alliance</td>
<td>Sheila Keane</td>
</tr>
<tr>
<td>Services for Australian Rural &amp; Remote Allied Health (SARRAH) Advisory Committee</td>
<td>Sheila Keane</td>
</tr>
<tr>
<td>Department of Health &amp; Ageing. Mental Health Advisory Committee</td>
<td>James Bennett-Levy</td>
</tr>
<tr>
<td>Northern Rivers General Practice Network AHPMA Advisory Committee</td>
<td>James Bennett-Levy</td>
</tr>
<tr>
<td>NSW PHC RED Advisory Committee</td>
<td>Tania Lietern</td>
</tr>
<tr>
<td>Broken Hill UDRP Advisory Committee</td>
<td>David Iyle</td>
</tr>
<tr>
<td>Broken Hill Centre for Remote Health Research</td>
<td>David Iyle</td>
</tr>
<tr>
<td>Far West Local Health District Board</td>
<td>David Iyle</td>
</tr>
<tr>
<td>Broken Hill Lead Reference Group</td>
<td>David Iyle</td>
</tr>
<tr>
<td>Australian Centre for Agricultural Health and Safety. Board of Management</td>
<td>David Iyle</td>
</tr>
<tr>
<td>Broken Hill Centre for Remote Health</td>
<td>David Perkins</td>
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<tr>
<td>Australian Commission on Safety and Quality in Health Care. Accreditation Implementation Reference Group.</td>
<td>David Perkins</td>
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<tr>
<td>Board of the International Foundation for Integrated Care</td>
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<td>NSW Health Expert Advisory Group on Mental Health Research</td>
<td>David Perkins</td>
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<tr>
<td>Broken Hill Liquor Accord Committee</td>
<td>Margaret Lenjak</td>
</tr>
<tr>
<td>Aboriginal Mental Health and Well-Being Reference Group</td>
<td>Tracy Robinson</td>
</tr>
<tr>
<td>Australian Rural Health Research Collaboration (ARHRC). Governing Board</td>
<td>Prauné Reddy</td>
</tr>
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<td>NSW Disaster Mental Health Advisory Council</td>
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<td>NSW Mental Health Clinical Advisory Council</td>
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<td>NSW Mental Health Program Council</td>
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<tr>
<td>NSW Health Community Guidelines Steering Committee</td>
<td>Prauné Reddy</td>
</tr>
<tr>
<td>NSW Farmers Mental Health Network</td>
<td>Karen Holley</td>
</tr>
<tr>
<td>NSW Farmers Mental Health Network</td>
<td>Craig Hart</td>
</tr>
<tr>
<td>Mental Health Workforce Sub-Committee of MHPC</td>
<td>Paul Fanning</td>
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<td>Bruce Middleton</td>
</tr>
<tr>
<td>NSW Health Policy Implementation Working Party</td>
<td>Paul Fanning</td>
</tr>
<tr>
<td>NSW Health Policy Implementation Working Party</td>
<td>Bruce Middleton</td>
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### Boards, Councils for Educational/Registration Programs

<table>
<thead>
<tr>
<th>Board/Committee</th>
<th>University of Western Sydney Nursing Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review Panel for</td>
<td>Member</td>
</tr>
<tr>
<td>SCU Master of Public Health Course Advisory Committee</td>
<td>Member</td>
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<tr>
<td>Australian Rural Health Education Network</td>
<td>Member</td>
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<tr>
<td>Sydney University. Clinical Training Advisory Committee</td>
<td>Member</td>
</tr>
<tr>
<td>SCU Master of Public Health Course Advisory Committee</td>
<td>Member</td>
</tr>
<tr>
<td>Australian Rural Health Education Network</td>
<td>Member</td>
</tr>
<tr>
<td>NSW Public Officer Advisory Committee</td>
<td>Member</td>
</tr>
<tr>
<td>GWIAS Mental Health Learning and Development Committee</td>
<td>Member</td>
</tr>
<tr>
<td>Australian Psychological Society. NSW Western Region Branch</td>
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<tr>
<td>Australian Psychological Society. Rural and Remote Psychology Interest Group</td>
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<tr>
<td>NSW Mental Health Workforce (Education, Training and Support Working Group)</td>
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<tr>
<td>AUSSNET Workforce Development Program – Train the Trainer Program</td>
<td>Member</td>
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<tr>
<td>NSW Institute of Psychiatry Course Advisory Committee</td>
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<td>NSW Mental Health Emergency Care (MHEC) Program: Evaluation Working Group</td>
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<tr>
<td>NSW Mental Health Emergency Care (MHEC) Program: Evaluation Working Group</td>
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<tr>
<td>Nourishing Networks Advisory Committee. Eating Disorders Workshops</td>
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<tr>
<td>NSW Institute of Psychiatry. Course Advisory Committee</td>
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<tr>
<td>Australian Psychological Society. College of Organisational Psychologists Executive</td>
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### Project/Program Steering Committees

<table>
<thead>
<tr>
<th>Board/Committee</th>
<th>Farm and Fishing Drug and Alcohol Research Group (FADROC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interdepartmental Network of Public Health – School of Public Health and Veterinary Science</td>
<td>Member</td>
</tr>
<tr>
<td>NSW PHC RED Management Committee</td>
<td>Member</td>
</tr>
<tr>
<td>University of Sydney. Academic Board Nominee</td>
<td>Member</td>
</tr>
<tr>
<td>Good Beginnings Board</td>
<td>Member</td>
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<tr>
<td>HealthOne Pottsville. Steering Committee</td>
<td>Member</td>
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<tr>
<td>Maternal Health Technical Advisory Group</td>
<td>Member</td>
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<tr>
<td>Parenting Research Centre Reference Advisory Group</td>
<td>Member</td>
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<tr>
<td>Raising Children Network. Scientific Advisory Group</td>
<td>Member</td>
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<tr>
<td>University Department of Rural Health, North Coast. Advisory Committee</td>
<td>Member</td>
</tr>
<tr>
<td>NSW PHC RED Management Committee</td>
<td>Member</td>
</tr>
<tr>
<td>Multi Hypothesis Advisory Committee, NCAHS and National Cancer Council</td>
<td>Member</td>
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<tr>
<td>Prevention and Information Centre</td>
<td>Member</td>
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<tr>
<td>University Department of Rural Health, North Coast. Advisory Committee</td>
<td>Member</td>
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<tr>
<td>University Department of Rural Health, North Coast. Advisory Committee</td>
<td>Member</td>
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<tr>
<td>Health Improvement and Prevention Study. Management Committee</td>
<td>Member</td>
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<tr>
<td>Broken Hill Lead Steering Group</td>
<td>Member</td>
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<tr>
<td>Australian Rural Health Scientific Symposium Biannual Conference</td>
<td>Member</td>
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<tr>
<td>Australian Rural Mental Health Study. Steering Committee</td>
<td>Member</td>
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<tr>
<td>NSW PHC RED Management Group</td>
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<tr>
<td>NSW Drought Welfare Coordinating Committee</td>
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<tr>
<td>NSW Rural Mental Health Conference Management Committee</td>
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<td>NSW Rural Mental Health Promotion, Prevention and Early Intervention Committee</td>
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<tr>
<td>Transcultural Rural and Regional Outreach Project</td>
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<tr>
<td>NSW Aboriginal Mental Health Workers Forum Planning Sub committee</td>
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<tr>
<td>Psychiatric Emergency Care Centre (PECC) Reference Group</td>
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<td>Rural Adversity Mental Health Program NSW Advisory Committee</td>
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<tr>
<td>Rural Mental Health Emergency Critical Care Evaluation Working Group</td>
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<tr>
<td>Northern, Rural &amp; Remote Psychology Advisory Group</td>
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<tr>
<td>Rhode Island Mental Health and Diabetes Working Party</td>
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<tr>
<td>Diabetes Australia. Cultural and Linguistically Diverse Programs Advisory Group</td>
<td>Member</td>
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</tbody>
</table>

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**Page 44**
Research Boards and Committees

Australian & New Zealand Neonatal Network. Data Coordinating Committee
Deborah Donoghue  Member

SEEF – 45andUp study: Investigators Meeting
Geoff Morgan  Member

North Coast Area Health Services Advisory Committee
Lesley Barclay  Member

Regional Development Australia: Northern Rivers Board
Lesley Barclay  Member

Early Home Learning Research Advisory Group
Lesley Barclay  Member

NSW Rural Research Colloquium 2011 Steering Committee
Lesley Barclay  Member

ERA Assessor for the Australian Research Council (ARC)
Lesley Barclay  Member

School of Public Health Research Committee
Lesley Barclay  Member

SARRAH Advisory Committee
Lindy Swain  Member

Papua New Guinea Institute of Medical Research Buttressing Coalition
Megan Passey  Member, Secretariat

Centre for Excellence in Indigenous Tobacco Control (CEITC) Advisory Group
Megan Passey  Member

Australian Rural Health Research Collaboration. Governing Board
David Perkins  Director

Australian Rural Health Education Network. Research Leaders Group
David Perkins  Chair

Greater Western Human Research Ethics Committee
David Lyle  Member

NSW Primary Health Care Collaboration
David Lyle  Member

Australian Primary Health Care Institute. Research Advisory Board
David Lyle  Member

Neuroscience Institute for Schizophrenia & Allied Disorders
Helen Stain  Affiliated Scientist

Australian Rotary Health Research Fund. Research Grants Committee
Helen Stain  Member

NSW Early Psychosis Advisory Group. Research & Clinical Committee
Helen Stain  Deputy Chair

Schizophrenia Research Institute. Cognition & Connectivity Panel
Helen Stain  Member

Consultant to Aboriginal Health & Medical Research Council
Helen Stain  Consultant

Cancer Council of Victoria. Clinical Oncology Research and Reference Group
Prasuna Reddy  Member

Acknowledgements

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