



Archived at the Flinders Academic Commons:

<http://dspace.flinders.edu.au/dspace/>

‘This is the peer reviewed version of the following article: McIntyre Ellen, Brun Lyn, Cameron Helen (2011) Researcher development program of the primary health care research, evaluation and development strategy. Australian Journal of Primary Health 17, 114–121. <http://dx.doi.org/10.1071/PY10049> ,

which has been published in final form at

DOI:

<http://dx.doi.org/10.1071/PY10049>

Copyright (2011) La Trobe University.

The Researcher Development Program (RDP) of the Primary Health Care Research, Evaluation and Development (PHCRED) Strategy.

Ellen McIntyre OAM, PhD, IBCLC

Primary Health Care Research & Information Service
Discipline of General Practice
Flinders University
GPO Box 2100
Adelaide, SA 5000

Lyn Brun BEd, MEd

WA PHCRED, Combined Universities Centre for Rural Health, Geraldton
PO Box 109
Geraldton WA 6531

Helen Cameron BA LLB, GradDipLegalPrac, MBA

Broken Hill Department of Rural Health, University of Sydney
PO Box 457
Broken Hill NSW 2880

Abstract

The Research Development Program (RDP) was initiated in 2004 under the Primary Health Care Research, Evaluation and Development (PHCRED) Strategy to increase the number and range of people with knowledge and skills in primary health care research and evaluation.

RDP Fellows were invited to participate in an online survey about the effect the program had on their research knowledge, attitudes and practice

The response rate was 42% (105/248). Most were female (88%) with 66% aged between 31 and 50 years. Over two thirds (72%) were health practitioners.

Activities undertaken during the RDP ranged from literature reviews, developing a research question, preparing ethics submissions, attending and presenting at conferences and seminars, preparing papers and reports, and submitting grant applications.

Despite the fact that only 52% agreed that the RDP time was adequate, 94% agreed that the RDP was a valuable experience, with 89% expressing interest in undertaking further research.

These results indicate that this program has had a positive effect on the RDP Fellows in terms of their knowledge about research, their attitude to research, and the way they use research in their work.

Introduction

It is recognised that having a strong primary health care sector improves population health (Starfield et al. 2005). Primary health care research plays an important part in energising and validating the health care system (Stewart et al. 2010). This area of research, being relatively new, needs support to build the capacity of the workforce and the research methodology so that it becomes an independent and competitive field of research to provide a robust body of knowledge.

Primary health care research and evaluation is vital in ensuring the quality and accountability of the primary health care sector (Farmer and Weston 2002). Internationally, a number of programs have been launched to increase research within the primary health care sector. For example, in Scotland, primary care research networks provided primary care practitioners with grants to buy time to undertake a research training course with a view to developing a research proposal (Hannay 2006). The UK has developed primary care research networks to provide avenues for diverse health practitioners to engage in research (Thomas et al. 2001). Canada has developed a national training program for primary health care practitioners that provide hands on research training as well as access to discussion groups and online workshops (Stewart et al. 2010). In the US a 10 week training program provided to doctor of pharmacy (PharmD) students was shown to increase the likelihood of students pursuing a research career path (Johnson et al. 2008).

Indeed, practitioners who receive some form of research training are more likely to participate in future research (Ried et al. 2008) and are also more likely to publish their research (Brand et al. 2008). A study investigating why general practitioners became involved in a research project indicated that the practitioners were motivated by the opportunity to update their knowledge and clinical skills, altruism, and the opportunity to potentially help their patients (Gunn et al. 2008).

A number of barriers have been identified as impediments to primary health care practitioners undertaking research. Lack of funding has been identified as a major barrier (Farmer and Pilotto 2001). Significant funding is required to enable practitioners to engage in research and participate in research networks and collaborations (McAvoy 2005). Other barriers to primary health care practitioners undertaking research have been identified as lack of time, organisational issues, lack of support and lack of research training (Barnett et al. 2005, Glynn L et al, 2009). Many practitioners are unaware of research resources available and are not encouraged to undertake research (Jones et al. 2003).

Despite the barriers and the difficulties to undertaking primary health care research, some very successful and relevant research has been conducted within primary care settings in relation to conditions that are common place in primary care (McAvoy 2005). These include research around management of chronic diseases (Kinmonth et al. 1998), and prevention (Wing et al. 2003).

In 2004, in an effort to increase research capacity within the Australian primary health care sector, the Australian Government funded the Researcher Development Program (RDP) as part of the Primary Health Care Research, Evaluation and Development (PHCRED) Strategy. This initiative was

designed to increase the number and range of people with knowledge and skills in primary health care evaluation and research (McIntyre et al. 2010).

The RDP allows participants to undertake paid, part-time research placements within academic environments. The placements usually run for one year and allow the novice researcher to work on a project and receive research training, support and mentoring (Birden 2007). The RDP is seen as providing a higher level of researcher development, and is more advanced than undertaking courses or training. The program is also valued for its ability to provide protected time for novice researchers to undertake research (Oceania Health Consulting, 2005).

The RDP began operating in the second half of 2004 in 21 Australian university departments of General Practice (UDGP) and Rural Health (UDRH) with the first cohort completing their fellowship by the end of 2005. In the first year it was set up as a national competitive process. In subsequent years funding was allocated to each department for this program. By 2009 the program had expanded to 26 departments of General Practice (n=14) and Rural Health (n=12). While the PHCRED Strategy as a whole has been evaluated twice during that time <<http://www.phcris.org.au/phcred/evaluation.php>>, this national survey of RDP Fellows provides a more personalized picture of the value of the RDP in terms of what was done and the outputs and outcomes achieved as reported by the recipients.

Methods

Survey

Recipients of the Researcher Development Program were invited to complete an on-line survey about their knowledge, attitudes and practice in relation to research. The survey included demographic questions, multiple choice questions, 5 point Likert rating scale questions and two free text questions relating to the impact of the RDP on their career and an open question asking for any further comments about the program.

The survey was developed, tested and conducted in 2008 in New South Wales (NSW) and the Australian Capital Territory (ACT) by the NSW Primary Health Care Collaboration comprising the seven university departments funded by this Strategy located in NSW and ACT. Ethics approval was given by the University of NSW Human Ethics Advisory Panels. Results of this study are soon to be published. The survey was also approved by the Flinders University and Southern Adelaide Health Service Social and Behavioural Research Ethics committee for use in the remaining states and territories in Australia in 2009. Further ethics approval was given by the University of NSW Human Ethics Advisory Panels to provide the de-identified data about RDP Fellows in NSW and the ACT so the two sets of data could be merged and analysed as a national data set. This ensured that the RDP Fellows from NSW and ACT were not re-surveyed.

Recruitment

The RDP recipients were identified by the Statewide Coordinators of the Primary Health Care Research, Evaluation and Development (PHCRED) Strategy in Western Australia (WA), South Australia (SA), Northern Territory (NT), Queensland (QLD), Victoria (VIC) and Tasmania (TAS).

An introductory letter and link to the on-line survey was sent electronically to the RDP recipients who had current email addresses and was followed by two email reminders. This was different to how participants were recruited in the NSW/ACT survey, where relevant PHCRED coordinators were involved in contacting participants and inviting them to participate.

Analysis

Descriptive analysis of the quantitative data was undertaken using *SPSS 17.0*. Qualitative data were summarised into themes where appropriate.

Results and Discussion

The response rate for Western Australia (WA), South Australia (SA), Northern Territory (NT), Queensland (QLD), Victoria (VIC) and Tasmania (TAS) was $68/195=35\%$ and for New South Wales (NSW) and the Australian Capital Territory (ACT) was $37/54=69\%$. A combined total response rate of 42% resulted by combining the data of the two studies. There was some missing data since not all participants completed the survey.

Most participants were female (88%) with 66% aged between 31 and 50 years and 57% based in a University Department of General Practice. The geographic distribution of the participants is shown in Fig 1. RDP Fellows from 25 of the 26 university departments are represented in the survey. The professions or backgrounds of the participants were very diverse although most (72%, $n=75$) were health professionals, in particular GPs ($n=20$) and nurses ($n=20$) (Table 1).

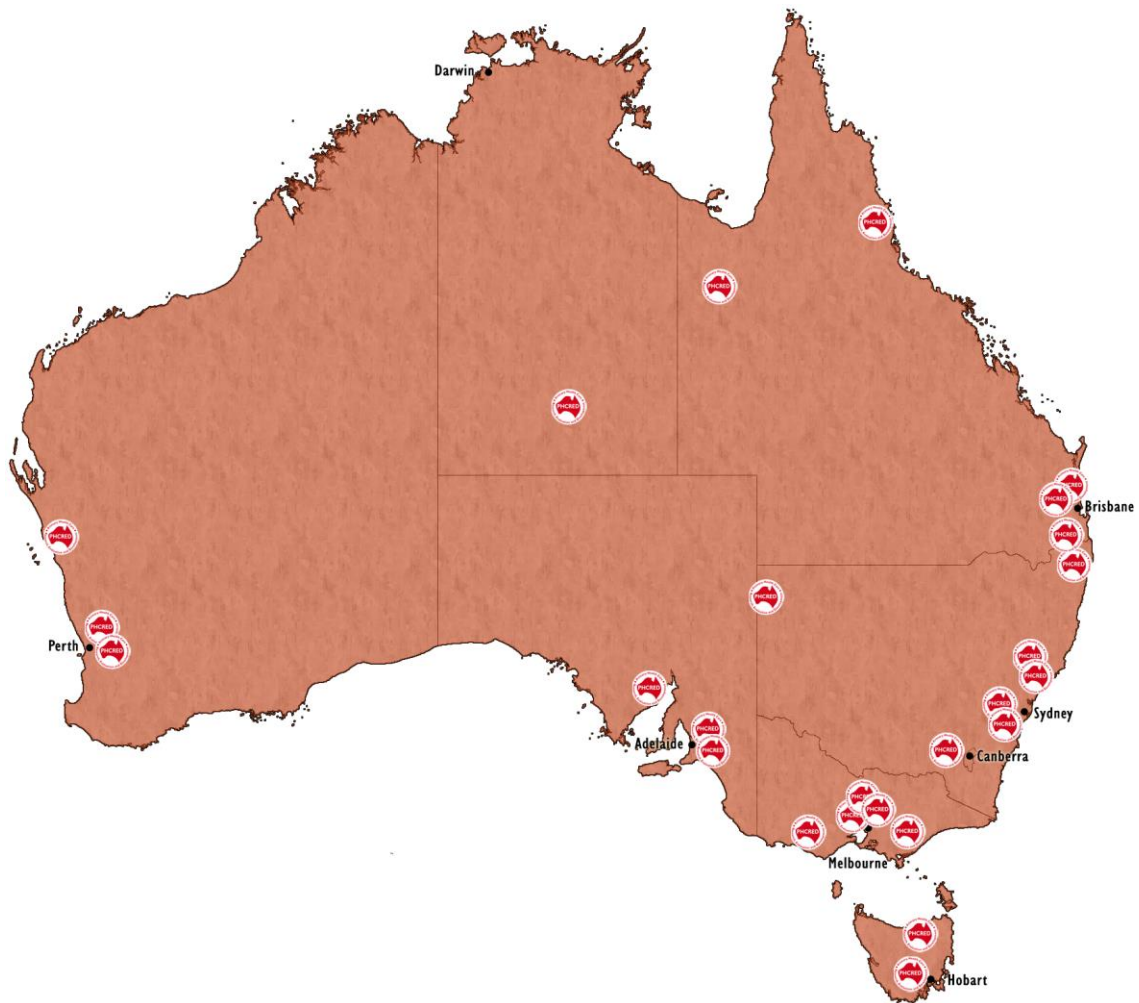


Figure 1 Location of the 26 departments of general practice and rural health

Table 1 Professions of participants

n=105	n	%
General Practitioner	20	19%
Nurse	20	19%
Occupational therapist	8	8%
Social worker	6	6%
Physiotherapist	4	4%
Other allied health (3 or less in a specific field - counsellor, dental therapist, dietitian, paramedic, pharmacist, speech pathologist, psychologist, radiographer)	17	16%
Researcher	12	11%
Consumer	2	2%
Program Manager	5	5%
Other (health worker, educator, health promotion officer, journalist, lecturer, manager, unknown)	11	10%
total	105	100%

Prior to starting the RDP, the most common research training was at the undergraduate level (n=31) followed by Masters (course work, n=23). However, 30 participants had had no research training. Undertaking research as part of a team was the most common research activity undertaken prior to starting the RDP (n=42). Of the nine who had not undertaken any research activity, seven had also not had any research training.

The length of time between the completion of any research training or activity and the start of the RDP ranged from less than one year to 20 years or more with two thirds commencing their RDP within five years of completing any research training or activities.

Fellows selected several objectives for doing an RDP with the most common objective being to improve research skills (Table 2).

Table 2 Expected objectives of the RDP (more than one objective may have been selected)

N = 101	n	%
Improve my research skills	88	86
Gain other skills useful for career development	59	58
Investigate a research topic within my discipline	58	57
Investigate a particular research question	54	53
Prepare an article for publication and see it published	51	50
Work on an existing project that was of interest to me	40	39
Other	12	12

These variations in professions, research experiences and objectives of the RDP Fellows has meant that the program needed to be very flexible as the following results demonstrate.

As mentioned earlier, while the RDP commenced in 2004, the first cohort did not complete their fellowship until the end of 2005. The calendar year of RDP participation of respondents is shown in Table 3. A few (n=5) took longer than a year to complete their fellowship. Table 4 shows the diversity in time spent working on the fellowship, with the most common being one day per week. Only half the participants (51%) agreed/strongly agreed that this was adequate time to complete the RDP work.

Table 3 Year of RDP participation

N = 102	n	%
2005	20	20%
2006	25	25%
2007	28	27%
2008	21	21%
2009	27	26%

Table 4 Time spent working as an RDP Fellow

N = 102	n	%
One day/week (range of weeks: 20 - 104)	48	47
Two days/week (range of weeks: 6 - 100)	26	25
Three days/week (range of weeks: 18 - 40)	9	9
A block of several weeks (range of weeks: 4 - 52)	11	11

Other	17	17
-------	----	----

Activities undertaken during the RDP were varied, ranging from literature reviews, developing a research question, ethics submissions, attending conferences and seminars, presenting at these events, preparing papers and reports, and submitting applications for grants and scholarships (Table 5). Since there was no specific question on research methods, we are unable to describe what specific research methodology skills and knowledge were gained in this area.

Table 5 Activities undertaken during the RDP (participants may have done more than one)

N = 101	n	%
Review of relevant literature	97	96
Development of project research question	82	81
Submission to an Ethics Committee	60	59
Receiving Approval from an Ethics Committee	56	55
Attending a PHC State Conference or Retreat	64	63
Attending a PHC National Conference	67	66
Presenting a paper at a local seminar	44	44
Presenting research to work colleagues	54	53
Presenting a poster at PHC conference	24	24
Presenting a paper at a discipline-related conference	38	38
Preparing and presenting a report within RDP network	42	42
Preparing a paper for a non-peer reviewed journal	6	6
Preparing a paper for a peer reviewed journal	34	34
Submitting a grant or scholarship application	27	27

Most (94%) agreed/strongly agreed that the RDP was a valuable experience with outcomes including presentations, publications, and changes in clinical practice (Table 6).

Table 6 Outcomes of the RDP (participants may have achieved more than one)

N = 101	n	%
Presentation	80	79
Publication	29	29
Changes in clinical practice	20	20

Most (82%) also agreed that the RDP had helped them move from a novice researcher to become a more experienced researcher. Indeed, 89% expressed interest in undertaking further research in the future. The effect this has had on their career mainly included an increased enthusiasm in keeping up with research in their field (77%), and maintaining contact with the network of researchers (63%) (Table 7).

Table 7 Effect of the RDP work upon career

The impact of the RDP work upon my career has been (N =101):	n	%
Increased enthusiasm in keeping up with ongoing research in specific field	78	77
Maintained contact with network of researchers	62	61
Greater understanding of linkages between research and practice	41	41
Greater interest in policy development in particular field	41	41
Change of career as a result of the RDP experience	24	24

Individual stories about the effect of the RDP work on participants' careers included undertaking a higher research degree, changing jobs, and bridging the gap between research and practice as the following demonstrate. It also means that research carried out within the primary care sector by primary health care practitioners ensures that relevant research is conducted (Magin et al. 2010).

The RDP has substantially changed my career and was an invaluable opportunity for me to move from clinical practice as an occupational therapist into public health research. It helped to build the research experience and initial publication track record to obtain an NHMRC PhD scholarship and go onto complete my PhD. I now work fulltime in public health research at a post doc level. (Occupational Therapist, 2005)

The RDP enabled me as an executive officer to seek, understand and apply evidence and to allocate resources to new research projects. Subsequently, I gained the role of CEO of an organisation that has a strong health research element. (Executive Officer, 2007)

I am now undertaking my PhD and lecturing in the area of speech pathology whilst still maintaining my clinical practice through the clinical education of students. (Speech Pathologist, 2007)

I am now a Clinical Trials Data Manager/Research Nurse. (Nurse, 2005)

Improved my ability to evaluate health promotion programs at a deeper level so they are suitable for dissemination as publications and presentations. (GP, 2007)

Table 8 summarised support features of the RDP experience. Most (84%) agreed/strongly agreed that they had received adequate support from their supervisor and had also developed supportive relationships with other researchers (84%). Participants also found that their RDP Fellowship made their regular work more evidence based both during (68%) and following their RDP Fellowship (54%).

Table 8 Support during the RDP experience

N =105	% agree/ strongly agree	% disagree/ strongly disagree	% does not apply
I received an adequate level of support for my RDP from my supervisor	84	8	0
I developed supportive relationships with other researchers during my RDP	84	8	1
I received an adequate level of support for my RDP from local RDP participants	68	4	13
I found that my research made my regular work more evidence-based during the RDP work	68	6	11
I received an adequate level of support for my RDP from my RDP mentor	66	4	24
I received an adequate level of support for my RDP work from my supervisor in my regular workplace	55	10	21
I found that my research made my regular work more evidence-based following the completion of the RDP work	54	4	21
My normal workload was adjusted to take account of the	45	28	18

RDP work			
I consider that my participation in the RD Program affected my ability to cope with my normal workload	44	34	9
My clinical colleagues had to take on extra work because of my absence due to my RDP work	12	49	31

While most comments about the program were positive, not everyone had that experience as indicated in the following.

Training offered during the program was not always available at the appropriate time.

I really needed more formal training in the early stages of the project. A workshop on interviewing methods became available only after I had started interviewing and long after I had designed my interview outline. A course on NVivo became available only after I had started data analysis, and has significantly delayed progress with my project. My immediate coordinator has little understanding of qualitative research (which is what my project is), and I have little access to more senior mentors. (GP, 2009)

Supervision was sometimes less than optimal and some processes took much longer than expected.

Just because a supervisor can do research does not mean they can teach research. Universities often make the fundamental error of putting researchers in the classroom. (Paramedic, 2009)

Due to unfortunate circumstances of staff changes I ended up with 3 different supervisors during my 12 months RDP. My ethics approval for a simple RDP project took months and was not granted until after my allocated RDP time! I therefore found it extremely difficult to have to start all over again with each new supervisor as each supervisor had very different ideas about how the project should be approached. Despite all this my final supervisor was fantastic and has given me time after the allocated RDP so I could complete and present my project. I highly recommended the RDP to all colleagues as despite my 'hiccups' during my time I think it was an invaluable experience. (Nurse, 2007)

Positive comments about the Researcher Development Program indicated that it was a valuable experience for several reasons. It enabled participants to develop research skills, to participate in research as well as develop an appreciation of the importance of research.

Very important program to allow clinicians the opportunity to participate in research. (GP, 2006)

The opportunity the RDP has provided me has been very valuable. It has provided me the opportunity to develop research skills and to network with other professionals. I believe I now have a more comprehensive understanding of the importance of research and the importance of evidenced based practice. (Nurse, 2006)

The program provided protected time for research as indicated by the following. Lack of time has often been identified as a barrier to research (Bacigalupo, Cooke, & Hawley, 2006, Barnett et al. 2005).

Very important program to allow clinicians the opportunity to participate in research. (GP, 2006)

Perfect opportunity and method to assist me back into the research field. It is allowing me to fulfill a passion for pursuing evidence based practice that the pressures of full time work do not allow. (Physiotherapist, 2009)

The program also provided mentoring and the opportunity to network with other researchers, something that is valued by researchers (Bacigalupo, Cooke, & Hawley, 2006).

I believe this is a very valuable program for developing researcher capacity and competencies because it offers a combination of dedicated time to undertake research related activity, access to a supportive environment and individualised development approaches; including mentoring. The experience was worthwhile for me on a practical basis, but also from a conceptual basis, as it enabled me to gain a 'sense' of my ability as a researcher within the research community and against my peers. I found this knowledge supported increased confidence and motivation to progress with further research. (Program Manager, 2005)

Several RDP Fellows also offered suggestions for improvement. One RDP Fellow reflected that the program could be “*enhanced by integrating the work into a post graduate qualification*” while another felt that “*new RDP Fellows might benefit from a nationally coordinated introductory course*” and a “*little e-handbook on places to look for information on 'how to research, how to write a paper...'*”

There are several limitations to this study. The response rate (42%) was not very high and there was a disparity between the response rates for NSW/ACT and the rest of the country. The higher response rate for NSW/ACT was most likely the result of a more personalised method of recruiting. The low response rate means that these results cannot be generalised to the whole cohort of participants of this program.

The results are those of the participants' self-reported experience in changing their research knowledge, attitudes and practice. It did not measure whether each participant had achieved this to any particular standard but several had made notable changes to their careers that suggest the program has increased the number of people with knowledge and skills in primary health care research and evaluation

Given the low response rate and the self-reporting nature of the methodology used, there is a need to undertake a more critical evaluation of this program focusing on what worked and what did not work in relation to increasing the number of people with knowledge and skills in this area of research so that the learnings can be captured and applied to future programs.

Conclusions

This study examined the extent to which the RDP has changed knowledge, attitudes and practice in relation to research from the RDP Fellows' perspective. It also developed a profile of the RDP participants. Respondents came from diverse health professional backgrounds, representing the range of professions involved in primary health care, including but not dominated by general practitioners.

These results indicate that overall this program has had a positive effect on the RDP Fellows. Most agreed that they had become more experienced in research (their knowledge of research has

improved) and were interested in undertaking further research with over 60% maintaining contact with other researchers (their attitude to research has been enhanced). Most also agreed that their regular work was now more evidence-based (their practice has changed).

The diversity in the background and level of research knowledge and experience of the RDP Fellows (their profile) has meant that the RDP has had to be tailored to enable individuals to achieve their objectives. This is demonstrated by the comprehensive range of activities that was undertaken and the support that was provided. This shows that the program can accommodate the broad nature of primary health care and the notion that research is more relevant when it is conducted by primary health care practitioners within the primary health care sector.

What was achieved not only reflects the backgrounds of the RDP Fellows but also the dedication they brought to the program along with the support provided to them during their fellowship from both their supervisors and colleagues. Despite the fact that only 52% agreed that the RDP time was adequate, 94% agreed that the RDP was a valuable experience.

Between 2005 and 2009, this program has provided an opportunity for people from a variety of backgrounds to improve their knowledge and skills in research and evaluation. That these people are located around Australia in urban, rural and remote areas further extends the reach of this program to enable future research and evaluation to be conducted in these settings. The results of this survey indicate that according to the RDP Fellows who completed the survey, this program has had a positive effect on the RDP Fellows in terms of their knowledge about research, their attitude to research, and the way they use research in their work.

References

- Bacigalupo R, Cooke J, Hawley M (2006) Research activity, interest and skills in a health and social care setting, a snapshot of a primary care trust in northern England: implications for collaboration and capacity. *Primary Health Care Research and Development* **7**, 68-77. doi:10.1191/1463423606pc265oa
- Barnett L, Holden L, Donoghue D, Passey M, Birden H (2005) What's Needed to Increase Research Capacity in Rural Primary Health Care? *Australian Journal of Primary Health* **11**, 45-53.
- Birden H (2007) The researcher development program: how to extend the involvement of Australian general practitioners in research? *Rural and Remote Health* **7**. Available at <http://www.rrh.org.au>
- Brand DA, Patrick PA, Grayson MS (2008) Mid-Career Research Training for the Generalist Physician: Case Study of a Balancing Act. *Teaching and Learning in Medicine* **20**, 180-185. doi: 10.1080/10401330801991899
- Farmer EA, Weston K (2002) A conceptual model for capacity building in Australian primary health care research. *Australian Family Physician* **31**, 1139-1142.
- Farmer EA, Pilotto L (2001) Capacity building in general practice research. *Australian Family Physician* **30**, 309.
- Glynn L, O'Riordan C, MacFarlane A, Newell J, Iglesias A, Whitford D, Cantillon P, Murphy A (2009) Research activity and capacity in primary healthcare: The REACH study: A survey. *BMC Family Practice* 10:33 doi:10.1186/1471-2296-10-33
- Gunn J, McCallum Z, Sancu L (2008) What do GPs get out of participating in research? *Australian Family Physician* **37**, 372-376.
- Hannay D R (2006) Evaluation of a primary care research network in rural Scotland. *Primary Health Care Research and Development* **7**, 194-200. doi:10.1191/1463423606pc296oa
- Johnson JA, Moore MJ, Shin J, Frye R (2008) A Summer Research Training Program to Foster PharmD Students' Interest in Research. *American Journal of Pharmaceutical Education* **72(2)**
<http://www.ajpe.org/view.asp?art=aj720223&pdf=yes>
- Jones A, Burgess TA, Farmer EA, Fuller J, Stocks N, Taylor J, Waters R (2003). Building research capacity: An exploratory model of GPs' training needs and barriers to research involvement. *Australian Family Physician* **32**, 957-960.
- Kinmonth AL, Woodcock A, Griffin S, Spiegel N, Campbell MJ, on behalf of the Diabetes Care from Diagnosis Research Team (1998) Randomised controlled trial of patient centred care of diabetes in general practice: impact on current wellbeing and future disease risk. *BMJ* **317**: 1202-1208.
- Magin P, Pirota M, Farrell E, Van Driel M (2010) General practice research training and capacity building. *Australian Family Physician*, **39**, 265-266.
- McAvoy BR (2005). Primary care research - what in the world is going on? *Medical Journal of Australia* **18**, 110-112.

McIntyre E, Brun L, Cameron H, Lyle D (2010) Evaluation of the Researcher Development Program (RDP) of the Primary Health Care Research Evaluation and Development (PHCRED) Strategy: The Fellows' perspective. (Primary Health Care Research & Information Service: Adelaide). Available at <http://www.phcris.org.au/publications/catalogue.php?elibid=8328>, cited August 12, 2010.

Oceania Health Consulting (2005) Evaluation of the Primary Health Care Research, Evaluation and Development Strategy. Available at <http://www.phcris.org.au/phcred/reports/PHCRED%20Evaluation%20-%20Summary%20Report.pdf>, cited August 13, 2010.

Ried K, Montgomery BD, Stocks NP, Farmer EA (2008) General practice research training: impact of the Australian Registrar Research Workshop on research skills, confidence, interest and involvement of participants, 2002-2006. *Family Practice* **25**, 119-126. doi:10.1093/fampra/cmn010

Starfield B, Shi L, Macinko J (2005) Contribution of Primary Care to Health Systems and Health. *The Millbank Quarterly* **83**, 457-502.

Stewart M, Reid G, Brown JB, Burge F, DiCenso A, Watt S, *et al.* (2010) Development and Implementation of Training for Interdisciplinary Research in Primary Health Care. *Academic Medicine* **85**, 974-979.

Thomas P, Griffiths F, Kai J, O'Dwyer A (2001) Networks for research in primary health care. *BMJ* **322**, 588-590.

Wing LM, Reid CM, Ryan P, Beilin LJ, Brown MA, Jennings GL, Johnston CI, McNeil JJ, Macdonald GJ, Marley JE, Morgan TO, West MJ for the Second Australian National Blood Pressure Study Group (2003). A comparison of outcomes with angiotensin-converting enzyme inhibitors and diuretics for hypertension in the elderly. *N Engl J Med* **348(7)**:583-592.

Conflicts of interest.

All authors are funded through the Primary Health Care Research, Evaluation and Development (PHCRED) Strategy. The third author was also involved in the NSW/ACT study.

Appendix. The university departments of General Practice (UDGP) and Rural Health (UDRH) funded under the PHCRED Strategy

	UDGP (n=14)	UDRH (n=12)
NSW/ACT	Australian National University – Academic Unit of General Practice and Community Health	
	University of Sydney – Discipline of General Practice	University of Sydney – Broken Hill Department of Rural Health
		University of Sydney – Northern Rivers University Department of Rural Health
	University of Newcastle – Discipline of General Practice	University of Newcastle – University Department of Rural Health Northern NSW
	University of New South Wales – The Centre for Primary Health Care and Equity	
QLD	Bond University	Mount Isa Centre for Rural and Remote Health
	Griffith University	James Cook University
	University of Queensland	
VIC	University of Melbourne – Department of General Practice	University of Melbourne – Department of Rural Health
	Monash University - Department of General Practice	Monash University - Department of Rural & Indigenous Health
SA	University of Adelaide – Discipline of General Practice	University of South Australia – Spencer Gulf Rural Health School
	Flinders University – Discipline of General Practice	Flinders University – Centre for Remote Health, NT
		Greater Green Triangle – Department of Rural Health, Flinders and Deakin Universities
TAS	University of Tasmania – Discipline of General Practice	University of Tasmania – Department of Rural Health
WA	University of Western Australia – General Practice	Combined Universities Centre for Rural Health
	University of Notre Dame Australia, Fremantle	