

Collaborative Research Hub

Knowledge Translation

May 2009

For more information about please contact:

Dr Kylie Armstrong
p: 07 4725 8868
m: 0416032307
e: karmstrong@gpql.com.au

Visit: www.gpql.com.au

A nexus between research and practice

Background

A new way of organising research is necessary if translation is to occur effectively and in a timely way in the future, focused on engagement and consensus to create an ever-expanding learning community. There is a need for research to be relevant and meaningful to practitioners, policy makers and consumers if it is to influence the future shape of human services in Australia. A consistent, integrated response is required, particularly during this period of reform and rapid change to ensure the research findings are translated into practical and policy solutions, but that research agendas must also reflect the real-world concerns of eventual end-users of research.

Knowledge Translation

Translational research^{1*} has been described as a two-way interactive process – research findings must be translated into practical and policy solutions, but research agendas must also reflect the real-world concerns of eventual end-users of research. To achieve this outcome, research must be based on good reciprocal relationships with practitioners and systems, and must fully engage end-users in the research process.¹ Most importantly, it must provide workable solutions that can be integrated into health systems and/or professional practice models, eventually becoming embedded into everyday processes.

Translation is thought to occur in several stages along a continuum. Rather than being a sequential process, it is more likely that this continuum is underpinned by a series of complex circular loops during which innovation is translated into the context, disseminated or diffused through the system and, hopefully, adopted.² However, the ultimate goal of translational research is normalisation, or the process by which innovation becomes embedded into standard practices and systems such that it is no longer viewed as something new.³

To achieve this outcome, research must be based on good reciprocal relationships with practitioners and systems, and must fully engage end-users in the research

^{1*} The following definition of Translational Research is offered by the National Institute of Neurological Disorders and Stroke (2002). Translational research is the process of applying ideas, insights, and discoveries generated through basic scientific inquiry to the treatment or prevention of human disease.

process. Most importantly, it must provide workable solutions that can be integrated into health systems and/or professional practice models, eventually becoming embedded into everyday processes. Therefore, the research agenda needs to focus on the development of a comprehensive, inter-disciplinary knowledge base and the translation of that knowledge into policy and practice. In the pursuit of such innovation, health systems are increasingly turning to researchers for solutions. This is highlighted in the discussion paper prepared by the National Prevention Task Force (2008)⁴ which outlines the importance in linking key leaders and research to support leadership and coordination in ensuring the implementation and support of prevention programs nationally.

What are the Issues and Impacts?

There is an overriding concern that professional learning and knowledge generated through research is mismatched with the conditions of practice⁵, leading to the paucity of evidence-based practice. There is also a concern that evidence from practice rarely informs research, increasing its irrelevance.⁶ Research is often done in isolation and usually relies on the direct relationship between individual's with an interest in research and evaluation within a Division. Healthcare solutions are usually reached slowly, with individual researchers and community organisations working in relative isolation, often in competition, each focused on their specific area of expertise. With little or no collaboration, discoveries are transferred by publication (if at all) resulting in duplication of effort and extending the length of time necessary for translation of knowledge. The effort and expertise is spread and there is no pathway to draw on this knowledge. Funds are wasted on short term projects, the growth of knowledge is not captured and this impacts on sustainability and the capacity to transfer this knowledge in practice and within a policy context.

Health systems are, in and of themselves, inherently multifaceted. System complexity is characterised by non-linear interactions, with networks of open feedback-loops and include populations in which people influence each others' behaviour across time and in unpredictable ways.⁷ The methods for translating such complex innovations into practical and workable solutions within healthcare settings and systems are less available. Instead, healthcare changes are usually reached slowly, with stakeholders working in relative isolation or even in competition, each focused on their specific area of expertise. With little or no collaboration, knowledge is rarely translated, resulting in duplication and extended timeframes.

A New Way Forward

A new way of organising research in practice is necessary if translation is to occur effectively and in a timely way in the future, focused on engagement and consensus to reflect the needs of practitioners and consumers engaging with the system. Evidence exists that highlights the need to explore new ways of supporting evidence-practice research, however no current platform exists which acts as a coordination centre for this interaction to occur. This includes the development of a strong network of integrated practice relevant and research active collaborations. Gunn (2002)⁸ recognizes the value in investing in networks of research practices to undertake larger scales studies, as apposed to the current research output in Australia and overseas which is relatively low. The Collaborative Research Hub will seek the development of interactive research practices that involve both academic researchers and the community as equal partners in all phases of the research process. The research seeks answers of immediate relevance to the community⁹ and has been described as the 'missing link' in the search for quality, evidence-based health care.¹⁰ To support this type of research and to foster University-



Division partnerships, Kalucy and colleagues^{11,12} from the Primary Health Care Research and Information Service (PHCRIS) suggest that it will require commitment and system change. This includes providing an environment, which promotes adequate opportunities, where mutual trust can grow to support effective links in increasing research activity in general practice. Linking academic institutions and Divisions of General Practice as key organizational networks forms the basis for the establishment of the Collaborative Research Hub and the knowledge networks who will have the task for implementing the research agenda.

If we are to be adequately prepared to respond,^{13,14} some issues require attention:

- Support for a system wide shift, which focuses on ongoing care for the individual patient, rather than the current system, which supports disease specific episodic care. The knowledge networks will advocate improved health and wellness through leadership and change management.
- Traditional discipline-centred modes of knowledge production must shift towards a broader conception of knowledge that transcends boundaries and responds to a wider reference group.¹⁵ The knowledge networks will adopt a broad model of knowledge and scholarship.
- Health research remains fragmented, competitive, highly specialized and sectoral.¹⁵ Despite rhetoric of collaboration, health researchers predominantly work in isolation, with little effective communication across disciplines to create hybrid knowledge. This program will contribute to building the capacity of researchers, Divisions of General Practice and community to develop inter- and trans-disciplinary knowledge.
- The diverse skills that will be required by health researchers extends beyond the narrow competencies found in any single field (eg., dealing with complex environments, collating and interpreting incompatible datasets, complex analytical techniques, multi-level modelling, process-based analyses, visuo-spatial, geographical techniques and e-research methods). The knowledge networks will build capacity across a range of methodological skills for contemporary research and draw on a cross section of disciplines.
- Consumer participation in contemporary health care has emerged as a critical strategy for managing disease and promoting health.¹⁶ Yet, successful models of consumer engagement are lacking, especially in relation to over-researched and time-pressured communities. Indeed, involving consumers in their health care remains the most significant challenge for health planning in the twenty-first century.^{17,18} This program will engage consumer representatives and organizations as partner researchers on the knowledge networks.
- Many studies have documented the evidence-practice gap, or the lag between recommended research-based guidelines and system change.¹⁹ There is little evidence of consultation with end-users and methods for translating complex innovations into practical and workable solutions within healthcare settings are poorly articulated. Although research is only one of many factors influencing the health policy process,²⁰⁻²² there are fundamental differences between research and policy communities including time frames,¹⁴ language,²³ priorities²⁴ that impede translation. A new way of organising knowledge is necessary, but one of the most frequently cited enablers is the development of relationships between researchers and policy makers²⁵⁻²⁹ such as those that will underpin the knowledge networks.
- Build on the social capital¹³ and linkage and exchange process³⁰ to support the operation of the knowledge networks and the translation of



Together
we can
build
a better
health
system

evidence.^{11,31,32} Build on the critical success factors identified by researchers Kaluchy and team at PHCRIS.^{11,12}

- Little attention has been given to capacity-building for practitioners and NGO's, many of whom now have research and evaluation as a core component of their work³³ and in their annual reporting to the Department of Health and Ageing. The Collaborative Research Hub will address this deficiency by engaging and supporting practitioners and policy-makers to join this and other research teams, build their research capacity and apply research skills to real-world problems.

References

- 1 - Anderson, Cosby, Swan, Moore & Broekhoven, (1999) The use of research in local health service agencies, *Social Science in Medicine*, 49 (8): 1007-1019
- 2 - Translational Research Working Group, National Cancer Advisory Board, NIH, USA, 2007
- 3 - May C., (2006) A rational model for assessing and evaluating complex interventions in health care, *Biomedcentral, Health Services Research*, 6 (86): doi: 10.1186/1472-6963-6-86
- 4 - National Preventative Health Taskforce. *Australia: The healthiest country by 2020 A discussion paper*, (2008). Commonwealth of Australia, Canberra
- 5 - Cross K (1998). Why Learning Communities? Why Now? *About Campus*, 3(3), 4-11.
- 6 - McDonald P & Viehbeck S (2007). Evidence-Based Practice. *Health Promotions Practice*, 8(2), 140-144.
- 7 - Gatrell A (2005). Complexity Theory and Geographies of Health. *Soc Sci Med*, 60(12), 2661-2671.
- 8 - Gunn JM., (2002) Should Australia develop primary care research networks? *Medical Journal of Australia*, 177: 63-66
- 9 - Zwar NA., Weller DP., McCloughan L., Traynor VJ., (2006) Supporting research in primary care: are practice-based research networks the missing link? *Medical Journal of Australia*, 185: 110-113
- 10 - van Weel C., & Rosser WW (2004) Improving health care globally: a critical review of the necessity of family medicine research and recommendations to build research capacity. *Ann Fam Med*; 2 Supp 2: S5-S16
- 11 - Kalucy EC., Jackson Bowers E., McIntyre E., Hordacre AL., & Reed Richard (2009) Exploring the impact of primary care research. Final report stage 2 Primary Health Care Research Impact project. Project Report, February. Retrieved on May 3, 2009 from http://www.phcris.org.au/phplib/filedownload.php?file=/elib/lib/downloaded_files/publications/pdfs/phcris_pub_8108.pdf
- 12 - Kalucy EC., Pearce CM, Beacham B., Lowcay B., & Yates RE., (2006) What supports effective research links between Divisions of General Practice and universities? *Medical Journal of Australia*, 185 (2): 114-116
- 13 - Hanney, S Buxton, M., Green, C., Coulson, D., & Raftery, J (2007) *An assessment of the impact of the NHS Health Technology Assessment Programme*: Health Technology Assessment HTA NHS R&D HTA programme.
- 14 - Hanney S, Gonzalez-Block MA, Buxton MJ, Kogan M.(2003). Health research policy and systems. *Health Research Policy & Systems*,1, 1-28
- 15 – Pang, T., et al. (2003). Knowledge for better health – a conceptual framework and foundation for health research systems. *Bulletin of WHO*, 81 (11), 1-6.



Together
we can
build
a better
health
system

- 16 - Towards a National Primary Health Care Strategy, A discussion paper from the Australian Government, Department of Health and Ageing, November 2008. Retrieved on May 3, 2009 from <http://www.health.gov.au/primaryhealthstrategy>
- 17 - Moore A & Brooks R (2000) Learning Communities. *International Journal of Adult and Vocational Learning*, 1.
- 18 - Primary Health Care Research, Evaluation and Development PHCRED (2009) 2nd Annual Primary Health Care Research Forum, Outcome Statement Preventative Health Care
- 19 - Grol, R. (2001). Successes and Failures in the Implementation of Evidence. *Med Care*, 39(8), 46-54.
- 20 - Lester, J., Wilds, L. (1990). The utilization of public policy analysis. *Evaluation and Program Planning*, 13, 313-319.
- 21 - Orosz, E. (1994). The impact of social science research on health policy. *Social Science and Medicine*, 39, 1287-93.
- 22 - Peterson, M. (1997). The limits of social learning: translating analysis into action. *J Health Politics, Policy & Law*, 22, 1078-114.
- 23 - Klein, R. (1997). Report from the field: learning from others: shall the last be the first. *J Health Politics, Policy & Law*, 22, 1267-78.
- 24 - Stoddard, J. (1997). Vantage point; translating research into practice and policy. *Ambulatory Child Health*, 322-28
- 25 - Lavis, J., Ross, S., Hurley, J. (2002). Examining the role of health services research in public policymaking. *The Milbank Quarterly*, 80,125-54.
- 26 - Szulanski, G. (2000). The process of knowledge transfer: A diachronic analysis of stickiness. *Org Behav & Human Decision Processes*, 82, 9-27.
- 27 - Wilensky, H. (1997). Report from the field: social science and the public agenda: reflections on the relation of knowledge to policy in the United States and abroad. *J Health Politics, Policy and Law*, 22, 1241-65.
- 28 - Plouffe, L. (2000). Explaining the gaps between research and policy. *ISUMA: Canadian Journal of Policy Research*, 3,135-39.
- 29 - Elliott, H. & Popay, J. (2000). How are policy makers using evidence? Models of research utilization and local NHS policy making. *J Epidemiology & Community*
- 30 - Lomas T., (2000) Using 'Linkage and Exchange' to move research into policy at a Canadian Foundation, *Health Affairs*, 19 (3): 236-40
- 31 - Estabrooks C, Thompson, D, Lovely J & Hofmeyer A (2006) A guide to knowledge translation theory. *The Journal of Continuing Education in the Health Professions*, 26 (1): 25-36
- 32 - Scott C & Hofmeyer A (2007) Networks and social capital: a relational approach to primary healthcare reform. *Health Research Policy and Systems* 5, (9) doi:10.1186/1478-4505-5-9
- 33 - Meyer, J, Johnson, B., Procter, S., Bryar, R. & Rozmovits. L. (2003) Practitioner Research: Exploring issues in relation to research capacity-building. *Nursing Times Research*, 8 (6), 407-417.

