

discussion

Closing the gap and widening the scope New directions for research capacity building in primary health care

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BACKGROUND Research capacity building initiatives abound within primary health care to increase the research base of the many component health professionals and organisations. Most initiatives aim to close the gaps between research, policy and practice. Many of these approaches have been unable to build the necessary skills among primary health care researchers to fully integrate research evidence into clinical practice, and ultimately to inform policy in this complex arena. **OBJECTIVE** To propose a paradigm shift in the content of capacity building as a step toward closing the gaps between research, policy and practice.

DISCUSSION The complexity of the primary health care environment and the concept of development as a means to understanding and operating within primary health care research, policy and practice environments is discussed. A small pilot study was used to identify the underlying skills required in research, evaluation and development. In order to facilitate the paradigm shift an organisational development model was utilised that demonstrated congruency with this skill set. Further research is required to validate and apply this model in a primary health care research capacity building context.

The Commonwealth Department of ■ Health and Ageing's Primary Health Care Research Evaluation and Development (PHCRED) Program incorporates a university initiative, the major focus of which is to increase the capacity of the primary health care sector to use, participate in, and lead research. This includes disseminating research findings and promoting their subsequent uptake into clinical practice and health policy. The relative dearth of these activities within general practice and other primary health care professions is well documented,1 as are the barriers to capacity building.2 Capacity building activities have traditionally focussed on those activities that fall within the current paradigm of research and evaluation.^{3,4} Such activities include critical appraisal, literature

searching skills, training in research methodologies, evidence based practice and health program evaluations.

The primary health care environment is multifaceted, encompassing a diversity of professions and organisations, each with unique perspectives, imperatives and cultures. Undertaking effective research in this area is similarly complex. Currently, there is a 'long standing cultural divide between researchers and practitioners'5 where 'those delivering the service are not involved in asking or answering questions that are relevant to their practice'. General practitioners tend to work independently in small business settings, within a prescriptive government funding model. In contrast, researchers are increasingly working in cross disciplinary teams toward achieving

academic publications and competitive grants from government and corporate organisations. Similarly, 'efforts by researchers and decision makers seem to proceed largely independently'.7 Policy is generally made within a political environment, where there are different modes of operation, stakeholders and incentives from either academic or clinical environments. Therefore, each major player is working in a different system, with mutually exclusive goals. Significant challenges are evident when these highly differentiated professionals attempt to coordinate their work directions with each other.8 Therefore, closing the gap between research, policy and practice constitutes a major challenge.

It is suggested that, for research to realistically influence practice, research ideas

and implementation strategies need to be discussed and translated across several organisational contexts and cultures. Research outcomes also need to be achieved within diverse, and increasingly complex arrangements in terms of funding, project management and reporting. The skills to operate in this complex arena are not taught in traditional academic courses, nor in conventional capacity building activities. This article argues that one of the keys to closing the gap between research, policy and practice may lie in the neglected concept of 'development'.

A new definition of development

Conventionally, development refers to a process of evolution and growth where inherent capabilities are enhanced to achieve a more advanced, useful or effective level of function.9 Within the context of organisational development, development generally refers to building the capacity of an organisation to deliver its services and products efficiently and effectively.^{10,11} More specifically, development skills are used to promote individual and organisational performance and accountability.12 For example, strategic planning activities aim to align diverse individuals or teams toward common goals and outcomes.

An understanding of organisational development theory has been used to facilitate a paradigm shift toward redefining development in a primary health care research context. Thus, development could be pragmatically described as the operational links between research, evaluation, policy and clinical practice. These interlinked processes of research, evaluation and development are cyclical in nature.

The RED cycle

The RED cycle (*Figure 1*) was developed by the authors as a simplified and pictorial description of research, development and evaluation activities and critical path-

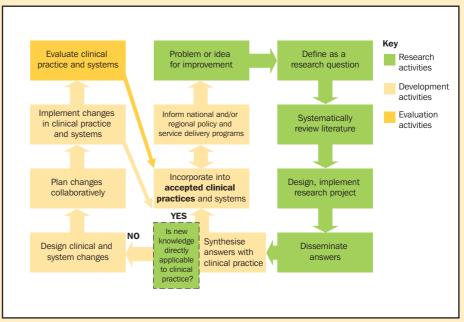


Figure 1. The RED cycle

ways, relevant to the primary health care environment. It can be considered a 'meta-cycle' that encompasses the conventional research cycle, ¹³ the five steps of evidence based practice, ¹⁴ the deep learning cycle, ¹⁵ and the continuous quality improvement cycle. ¹⁶ The multiplicity of arrows, particularly around development activities (green boxes) represents the known complexities of influencing clinicians' behaviour. ^{17,18}

The RED cycle can be used to identify the requisite processes and skills for a given activity. It is accepted by researchers that to systematically review available evidence and define the evidence gap requires skills such as literature searching, critical thinking and research design. In order for research findings to influence clinical practice, skills such as systems thinking, planning, communication, negotiation and change management are required. The RED cycle may also be used as a project planning template to assist with designing and evaluating projects, including the dissemination of research evidence and managing changes in clinical practice.

Development skills for researchers and clinicians

What skills are required for effective development within the context of

Table 1. Generic skills that underlie development, research and evaluation

Communication Writing Facilitation Working in teams Selling your ideas Critical thinking Contingency planning Systems management Strategic planning Identifying needs/gaps Prioritisation Change management Leadership Innovation Creativity Education Project management Dissemination

primary health care research? It is difficult to find direct answers to this question using conventional health and educational databases such as Medline, CINAHL and ERIC, although there is a growing body of literature that covers issues relating to guidelines for clinical practice, service delivery and policy development.

A small pilot study was undertaken to identify the underlying skills required in research, evaluation and development. Fifty primary health care related professionals (representing clinical, academic and policy environments) attended the Queensland PHCRED conference in November 2002 to explore the processes and skills required to build research capacity. Participants were allocated to

small groups, where they were facilitated to identify the underlying processes and skills required for research, evaluation and development. During the following plenary session, those generic skills that applied to development and overlapped with the areas of research and evaluation were highlighted (*Table 1*). Although these results cannot be generalised beyond this convenience sample, there is clear congruency with an existing model of management development.¹⁹

This 'competing values' model has been developed to integrate pre-existing management theories that independently had been insufficient to cope with the complexity of modern organisations. It delineates generic roles and competencies that describe effective leaders and organisations (*Table 2*) and is used in management skills programs that have been specifically designed for health care professionals.²⁰ It is proposed that these generic skills are transferable to a primary health care research context and therefore should be considered as providing new directions for research capacity building in primary health care. Further research is underway to explore the inclusion and relevance of these skills in primary health care research training.

Primary health care research occurs within a very complex environment and there is limited integration between research evidence, clinical practice and health care policy. The RED cycle represents a series of steps that encompass research, evaluation and development activities and reaffirms the centrality of clinicians in the capacity building process. This article has redefined the concept of development and proposed a new set of skills for researchers and clinicians to bridge these gaps between research, policy and practice.

Conflict of interest: none declared.

References

- Dinant G J. General practice research: for universities only, or a normal part of everyday care? Aust Fam Physician 2002; 31(2):193–194.
- 2. Shah N C, Pond D, Heaney S. Research capacity building in general practice: the new Australian scene. Aust Fam Phys 2002; 31(2):201–204.
- Op 't root J, Geus K. Research training for general practitioners: An experiment in the Netherlands. Fam Pract 1992; 9(1):82–84.
- 4. North American Primary Care Research Group Committee on Building Research Capacity. What does it mean to build research capacity? Fam Med 2002; 34(9):678–684.
- 5. Haines A, Jones R. Implementing findings of research. BMJ 1994; 308:1488–1492.
- Whitford D L, Jelley D, Gandy S, Southern A, Van Zwanenberg T. Making research relevant to the primary health care team. Br J Gen Pract 2000; 50:573–576.
- Lomas J. Beyond the Sound of One Hand Clapping: A discussion document on improving health research dissemination and

Table 2. Generic roles and competencies of a manager¹⁹

Role	Competencies
Mentor	Understanding self and others
	Communicating effectively
	Developing employees
Facilitator	Building teams
	Using participative decision making
	Managing conflict
Monitor	Managing information through critical thinking
	Managing information overload
	Managing core processes
Coordinator	Managing projects
	Designing work
	Managing across functions
Director	Developing and communicating a vision
	Setting goals and objectives
	Designing and organising
Producer	Working productively
	Fostering a productive work environment
	Managing time and stress
Broker	Building and maintaining a power base
	Negotiating agreement and commitment
	Presenting ideas
Innovator	Living with change
	Thinking creatively
	Managing change

- uptake. Sydney: University of Sydney, 1997.
- Mickan S M, Boyce R A. Organisational adaptation and change in healthcare. In: MG Harris and Associates, eds. Managing Health Services: Concepts and Practices. Sydney: MacLennan and Petty, 2002.
- 9. Delbridge A, ed. The Macquarie Dictionary. 3rd edn. Sydney: The Macquarie Library, 2002.
- 10. The Organisational Development Network. http://www.odnetwork.org
- 11. Legge D, Stanton P. Learning management (and managing your own learning), in MG Harris and Associates, eds. Managing Health Services: Concepts and Practices. Sydney: MacLennan and Petty, 2002.
- 12. Shea G, Berg D. Analysing the development of an OD practitioner. J Appl Behav Sci 1987; 23(3):315–336.
- 13. Bailey D M. Research for the health professional: A practical guide. Philadelphia: FA Davis, 1991.
- 14. Sackett D L. Evidence based medicine: How to practice and teach EBM. Edinburgh: Churchill Livingstone, 2000.
- Kolb D. Experiential learning: Experience as the source of learning and development. Englewood Cliffs: Prentice Hall, 1984.
- 16. Schattner P, Markey P. Divisions, general practice and continuous quality improvement. What is the connection? Aust Fam Physician 2001; 30(7):725–728.
- Oxman A D, Thompson M A, Davis D A, Haynes R B. No magic bullets: A systematic review of 102 trials of interventions to improve professional practice. CMAJ 1995; 153(10):1423–1431.
- Miller W L, McDaniel R R, Crabtree B F, Stange K C. Practice jazz: Understanding variation in family practices using complexity science. J Fam Pract 2001; 50: 872–878.
- Quinn R E, Faerman S R, Thompson M P, McGrath M R. Becoming a master manager: A competency framework. New York: John Wiley, 2003.
- Centre for Medical Education. I wish I had the answer! Dundee: The University of Dundee, 1997. (http://www.dundee.ac.uk/ meded/management/welcome.htm). Accessed June 2003.

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