Research

Ratcheting Up Research Efforts for Systems Change

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Consider the past decade of nursing research in Canada. A critical mass of nurses, at various stages of their research careers, has successfully competed for research personnel awards; nurses have established innovative programs of research; and new graduate programs for nurses have flourished. These are impressive achievements. Yet nursing research in Canada is at a critical juncture. As we look ahead to the next decade, we are challenged to build on the successes and momentum achieved, to conduct research that yields knowledge of relevance to a wide range of end users and to maintain the creative edge required for scholarly inquiry that is not exclusively driven by funding opportunities.

These challenges raise many "how to" questions: how to provide strong mentorship for new researchers; how to optimize opportunities afforded through interdisciplinary teamwork; and how to reduce the lag time from research completion to uptake. In response to such questions, new funding opportunities have arisen. Among these are personnel awards for clinician scientists and nursing chairs and interdisciplinary and interinstitutional training centres (Edwards et al. 2002). These initiatives are creating a solid base of research infrastructure. With plans for building this infrastructure now in place, I think we should turn our attention to another challenge: ratcheting up our research efforts to make a difference at the systems level. I will describe why this is important and, from the point of view of a researcher whose primary base is in academia, suggest several ways this might be achieved.

Why Ratchet Up?
Methodologically sound research provides us with new insights, new knowl-

edge and new ways of understanding problems and phenomena. Research requires a substantial investment of time and resources. Therefore, it is important to consider how research findings might be better used to support decision-making and how they might be harnessed to produce systems change. A new arena of research funding (variously called knowledge transfer, research dissemination or research uptake) (Griffin and Edwards 2002) has emerged to address the question of using research for decision-making. However, "ratcheting up" for systems change goes beyond the usual endpoint of research transfer. Systems change involves the wider adoption of an innovation and diffusion across multiple levels of the system that, in turn, result in more sustainable change. It is the difference between persuading a team of nurses within an organization to adopt a change in their practice, and infusing this change in practice across many organizations and practice settings and through educational curricula and policy initiatives. As a specific example, in my field of research, it is the difference between working with the staff of a home care agency on strategies to encourage clients to install grab bars in their bathroom to prevent falls, and working with the Canadian Standards Association, Home Building Associations and the National Research Council on implementing changes to building codes so that all new homes have bathtub grab bars installed as standard equipment (Lockett et al. [in press]).

As researchers, we find the thought of actively contributing to systems change challenging. The focus of our day-to-day activities is identifying researchable questions, applying for funds to keep our research staff employed and our programs of research at the cutting-edge and using more traditional means of dissemination (e.g., publications and conference presentations). A strong reward system within academia that determines who gets tenure and which academics are promoted tends to keep us focussed on these passive approaches to informing others of research findings. The networks we build and nurture tend to be those oriented to successfully implementing our research projects, rather than those oriented to systems change. Figure 1 contrasts the characteristics of these two types of networks.

The goal of systems change may seem daunting, and probably many researchers would argue that it is not within their purview. However, without attending to systems change, enormous efforts by nurse researchers across the country will produce, at best, only marginal results. Five or 10 years from now, we will continue to raise such concerns as: Why are nurse practitioners not better integrated into the healthcare system? How can we ensure that clients with Type II diabetes receive the tailored education they require to manage their chronic disease irrespective of which clinic they attend? Why haven't social norms shifted to support pregnant and postpartum women to quit smoking and stay quit for both themselves and their babies? Why do poor families have to

FIGURE 1: Contrasting networks: research vs. systems change	
Networks Oriented to Research Projects	**Networks Oriented to Systems Change**
Research collaborators who bring in-depth substantive and methodological expertise to the project	Policy collaborators who bring a critical understanding of the policy development process and in-depth expertise on the creation of policy options
Decision-making partners who are collaborators on research studies	Decision-making partners with mature networks of "movers and shakers" across many organizations and associations
Clinical agencies that are sites for recruiting clients or data collection	Clinical agencies intent on implementing and being champions for change within the system
Advisory committees that provide suggestions for secondary analysis and new research questions	Advisory committees that provide input on clinical agencies or policy arenas that are ready for change
Mentors who provide guidance on grantsmanship, effective writing for publication and developing a program of research built on a solid line of scholarly inquiry	Mentors who provide guidance on systems change, targeting dissemination messages to those who may be ready to consider new options for service delivery and creating communication channels and feedback loops between those doing the research and those funding and managing the system

pay user fees for children's recreation programs? Why aren't bathroom grab bars standard equipment to prevent falls in all Canadian homes? I think there are some proactive options that we might consider to move toward systems change. In the hope of generating some more dialogue on this matter, I will briefly discuss three ideas.

Futuristic Think Tanks on Systems Change

If you do not know where you are going, it is difficult to sort out the means to get there. A starting point for thinking about systems change might be a series of futuristic think tanks on health and healthcare issues in which the nursing community has already demonstrated leadership. We might begin with areas where momentum has been created and a solid body of research has been assembled: primary care reform, strengthening public health infrastructure and practice or the use of decision support tools. Bringing together innovative leaders in practice, policy and research, these think tanks would provide a venue to define how the healthcare system might be shaped differently, to consider what we already know about making these changes and to identify priority research questions that need to be addressed. These think tanks would require a commitment by professional associations and nongovernmental organizations as well as the research

and practice communities. The work of the think tanks would be enhanced by opportunities for post doctoral fellows to be involved with the creation of nursing "scholars in residence" positions in leading nursing organizations and a primary affiliation with a think tank. For researchers, think tanks might encourage us to consider new ways of assembling research findings in support of policy decisions and stimulate a new generation of research questions about the larger context of health systems change.

Rapid Response Teams

Timing is critical to influence systems change successfully. For those working within academic settings it can be difficult to take advantage of those moments when organizations and political systems are ripe for innovation. When the political timing is right, or an issue suddenly becomes a pressing concern in the policy world, it may be challenging for researchers to drop their focus on current research projects and revisit research findings published months or years previously.

Perhaps we need rapid response teams to address these challenges. In my opinion, these teams would need to be led by those who are already well networked in the policy arena. Obvious candidates for these roles would be leaders within professional associations and nongovernmental organizations. Nurse researchers could be ex officio members of these rapid response units, willing to provide "on call" duty. Nurse researchers would need to be prepared for these roles

with classroom training and experiential learning on such topics as working with the media (print, radio, TV), communicating messages to those in the policy arena and preparing policy briefs. Leaders from associations and organizations would benefit from training on creating policy-relevant messages from research findings and integrating research findings into policy statements. Policy-scientist positions could also be established. These would be of interest to individuals wanting to pursue research on the functions of rapid response teams and their interface with those in the policy world. This research might yield new insights on strategies for systems change.

Establishing a Presence at the Interface for Change

For many nurse researchers, being at the interface for change has often involved strong links with clinical agencies and working to implement change with healthcare workers employed by those agencies. However, a more diverse set of strategic links is required for systems change. Examples include connections with the media, work on the political front (municipal, provincial and federal levels), links with nongovernmental organizations and professional associations and collaboration with other research centres. Connections that bridge sectors and that link initiatives across jurisdictions are also important. Building such a complex web of connections and determining how to nurture relationships beyond the life of a research project are challenging.

There are some excellent examples of groups that have developed these types of connections at both provincial and national levels. Among these are national coalitions such as the Chronic Disease Prevention Alliance (Garcia 2002) and the system-linked research units in Ontario that have mature and solid links not only with health services agencies but also with government departments and the voluntary sector.

We need to start introducing nurses to such alliances, coalitions and research units earlier in their careers. In graduate programs, policy and research practicums would provide useful exposures to the organizational cultures that influence policy change and research development processes. Becoming familiar with the communication tools (e.g., policy briefs, media releases) used in these types of settings would also be beneficial. At the post-doctoral level we should encourage nurses to build their links with individual decision-makers and their respective agencies. With new investigator personnel awards, we should help researchers build their links to complex networks such as national coalitions. It would be worthwhile to more actively pursue existing initiatives that provide exchanges between academic units and government departments such as interchange programs with the federal government. It is through these types of fruitful exchanges that relationships can be nurtured and ongoing opportunities created for contributing to systems change.

Conclusion

Moving toward this type of change requires us to envision the possibilities of systems change, working closely with partners to identify how research may inform program and policy options and co-creating new ways of doing things. I think we have the capacity to work proactively in this direction and to prepare a new generation of researchers, practitioners and educators who are truly reshaping our healthcare system.

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