Notes from the Editor-in-Chief

In this issue of *HealthcarePapers*, Timothy Huerta, Ann Casebeer and Madine VanderPlaat provide a critical overview of the theoretical underpinnings of the use of networks for health services delivery and research. They note that the use of networks is often promoted but that there is little empirical evidence that they increase effectiveness. In defining networks, the authors remind us that John Barnes first used the term *social network* in 1954 in describing social interactions in Norwegian fishing communities. The authors offer a multidimensional framework for understanding networks and the challenges and opportunities they present.

A network is defined as a group of three or more autonomous organizations working together to meet the needs of a particular population – in this case, a healthcare population. A classification of networks is provided, sub-classified by processes on a continuum of activities from exploration to exploitation; and by outcomes on a continuum of goals from conception to implementation. The authors describe pressures experienced by networks, especially healthcare networks, to upset the preferred balance between decentralized and centralized approaches. Huerta et al.'s experiences suggest there are six paradoxes confronted by healthcare delivery networks, and these are described in the paper.

We received seven excellent commentaries on this lead paper. The first three commentaries focus their attention on the conceptualization of networks as described by Huerta et al. The second group of four commentaries provides excellent examples of real networks the authors have experienced.

We begin with a review by Alison Gilchrist, director of Practice Development, Community Development Foundation (UK), who has written extensively on networks. Gilchrist draws upon her own wide experience with networks and comments that "the provision of healthcare in the new environment of multi-agency, cross-disciplinary partnerships and community engagement appears to have benefited from the network model (Gilchrist 2007), but it is refreshing to be reminded of some of the tensions and limitations inherent in networks, especially when they are established to provide services or manage significant resources." She goes on to say,

> Networks operate best when they emerge from relationships of shared trust and mutual respect. Creating these conditions involves interpersonal interaction (not just organizational liaison), and this requires an investment of emotional labour by all concerned. Maintaining the network also takes time and effort initiating and managing transactions between members and holding an overview of the network's purpose. These functions are usually not budgeted for or included in job responsibilities, and yet without them, networks tend to dissipate or implode. The establishment and sustenance of a network involves working at the edges and interfaces of organizations; this is often overlooked in formulating official

> outputs and outcomes, mainly because such work is complicated and uncertain. It is also often undertaken by women.

Gilchrist sees networks as far from passive, requiring effort and competence, not just patience and loyalty. She concludes her paper by referring readers to the current European trend to re-examine concepts of social capital, which, like network analysis, focuses on collective efficiency and co-production.

Keith Provan and Brinton Milward – from the School of Public Administration and Policy, University of Arizona, and who are leading scholars in North America on networks – indicate that organizational networks, although perhaps seeming like a new phenomenon, have frequently been discussed and studied for at least the past decade. Provan and Milward go on to indicate,

> Despite this recent attention, networks have always been used (although not always called networks), especially for delivery of health and human services, where problems are severe and resources insufficient. What *is* new is that scholars and practitioners have come to recognize the value of focusing on networks as a unique and valuable mechanism for the provision of services that is distinct from the more traditional organizational focus. Organizations are still very much involved, but the more recent belief is that client needs are best addressed through an integrated and coordinated system of care, involving multiple organizations working together.

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These authors commend Huerta et al. for their attempt to lay out the logic of networks and in presenting ideas and analytic frameworks for thinking about networks from both an academic and a practitioner perspective. However, Provan and Milward believe the lead paper by Huerta et al. falls short in a number of ways. In their view, there is a lack of consistency in the paper and the pieces do not fit logically together. They point out that, in terms of the typology of networks, healthcare delivery networks rarely need to be categorized and often fluctuate back and forth over time from one category to another. They criticize Huerta et al.'s definition of networks as "three or more autonomous organizations," suggesting that in healthcare, the relationships are more complex: those involved in the network are not in an exclusive relationship; the organizations will probably engage in the network to meet perhaps only a small part of their mission. In their own work, they make a distinction between an organization and sets of programs. The authors had a number of concerns about Huerta et al.'s discussion of paradoxes, indicating that the examples

provided were not descriptions of paradoxes but more advantages and impediments.

Marc Pelletier, vice-president of Clinical Support and Strategic Planning at the Fraser Health Authority, provides an excellent practitioner perspective. He too had some criticism of Huerta et al.'s typology and preferred to use alternative dimensions such as membership composition, cultural alignment, decision authority, time frames, accountability, outcome focuses and so on to help understand the workings of networks. From the discussion of paradoxes, he learned three main ideas: (1) form follows function, (2) goals must be valued and legitimized by the base organizations, and (3) the goals being pursued must be translated into tangible and measurable terms.

Louise Lemieux-Charles, from the Department of Health Policy, Management and Evaluation at the University of Toronto, addresses four of the paradoxes proposed by Huerta et al. – resourcing, synergy, defragmentation and evaluation – and uses recent evidence from the Ontario Regional Stroke Strategy and the Dementia Care Networks Study to explore the challenges identified in greater depth. These networks "have developed in the province of Ontario as part of broader government-supported strategies to organize care around particular disease groups. For example, the Ontario Stroke System (earlier known as the Regional Coordinated Stroke Strategy and a model for the recently created Canadian Stroke Strategy [Heart and Stroke Foundation 2006]) and the Alzheimer Strategy use networks as one of their strategies to facilitate care coordination." In terms of the importance of resources, Lemieux-Charles astutely points out that even though start-up resources were provided by the province for the Stroke and Alzheimer networks, there is always concern about sustainability over the long term. She notes that there is an interest on the part of all stakeholders in the effectiveness of networks.

Researchers at the University of Toronto (Cockerill et al. 2006) recently completed an evaluation of four dementia networks using the network effectiveness model of Provan and Milward (2001). Lemieux-Charles also proposes seven critical strategies to advance the practice and research agendas related to network development and evaluation: developing a shared vision of care for particular groups of care recipients/clients, products and services that goes beyond a single sector (e.g., acute care only); identifying the aspects of care that will most likely benefit from a network structure; embedding networks within broader strategies; developing both clinical and management leadership and collaborations at the organizational and network levels; developing mechanisms to understand care-recipient flow and where gains can be achieved through interactions of key organizations and service providers; using administrative and information mechanisms to increase efficiencies within networks; and acknowledging that variations will exist between similar networks.

The excellent response provided by Charmaine McPherson, St. Francis Xavier University; Janice Popp, Southern Alberta Child and Youth Health Network; and Ron Lindstrom, Child and Family Research Institute; analyzes the perspective of Canadian children's networks. According to these authors, children's inter-organizational networks have proliferated in Canada over the past decade, with at least 20 such networks operating in five provinces (Popp et al. 2005). Some provincial governments have mandated their development as a means of service integration and child health outcome improvement, while others have developed voluntarily. These networks focus on the

coordination of policy development, priority setting, service planning and service delivery in support of the health and well-being of children and their families within a provincial region. As with other networks, they aim to reach a goal that none of them can reach separately. The membership of some of the children's networks is diverse, including mental health services, school boards, child welfare services, provincial ministries, parents and community leaders, to name several. The membership may represent various service sectors, depending on the multiple service needs of this vulnerable population. McPherson et al. focus their discussion primarily on the paradox of structure as described by Huerta et al., and conclude with three propositions for children's networks that could guide further study.

Terrence Montague, of the Disease Management Research Group, uses his experiences with disease management to illustrate the benefits of population-specific networks. He believes that patients should be included as partners in the network, and that this partnership can lead to better knowledge translation and more beneficial outcomes. For example, in his research in the Improving Cardiac Outcomes in Nova Scotia community-based heart disease project, he found that when patients were included as part of the team, there was a marked decrease in rates of re-hospitalization over the five-year course of the project. This improvement was only very weakly related to the usual risk factors, such as the presence of multiple illnesses or older age, or to the use of efficacious medical therapies. Through this cardiac network, patients, families and providers were kept aware of project goals, strategies and the evaluation of outcomes. Montague suggests that one outcome of this shared knowledge may have been the reduced need for re-hospitalization.

Our final commentary is by Sarah Hayward, of Swift Efficient Application of Research in Community Health (SEARCH) Canada, who builds on the work by Huerta et al. by drawing on experiences at the Alberta Heritage Foundation for Medical Research (AHFMR) and SEARCH. AHFMR asserts the following mission: "To support a community of researchers who generate knowledge, the application of which improves the health and quality of life of Albertans and people throughout the world. Our long-term commitment is to fund health research based on international standards of excellence and carried out by new and established investigators and researchers in training." SEARCH Canada is "an Alberta-based partnership program that trains people in applied health research and using research evidence in making health services decisions." The network of SEARCH participants that has evolved through the SEARCH Classic program is one intended to create a visible set of activities and relationships among a diverse group of health professionals (Casebeer et al. 2003). It engages individuals with their organization's support. With growth in numbers and strength in the overall capacity of the system, the network has become self-sustaining

"… the network has become self-sustaining through informal ties and is focused on sharing tacit knowledge.

through informal ties and is focused on sharing tacit knowledge. Hayward compares the network to a spider's web.

Hayward concludes by stressing the importance of clarifying terminology, especially when funding is being proposed to support network activities. She quotes a comment from a peer-review committee member, considering a request to fund a network: "We wouldn't want it just to be a band of enthusiasts, would we?" In Hayward's view, additional synonyms for *network* are *company*, *group* and *alliance*, although others in this issue of *Papers* would probably disagree that these terms can be used interchangeably. She suggests that "the continued proliferation and maintenance of networks in healthcare demonstrates that there is an important function and purpose being served by a new genre of relationship patterns between or independent of organizations. However, this genre is full of variations, and *network* is not always a helpful term."

It is of note that among the various writers in this issue of *HealthcarePapers*, only Marc Pelletier raises the issues of possible similarities between networks and collaboratives. I believe collaboratives have many features in common with networks. For example, collaboratives are formed by bringing together individuals and organizations with a common purpose and to pursue a common goal. They may be formed for a limited time period, or they may exist for several years.

Collaboratives have been found to be particularly useful in multi-organizational approaches to quality improvement. For example, in 2003 Wilson, Berwick and Cleary conducted interviews with 15 leaders of collaboratives to identify common components. Their findings suggested seven features that the leaders thought were important for effectiveness: sponsorship, topic, ideas for improvements, participants, senior leadership support, preliminary work and learning, and strategies for learning about and making improvements. Similar studies have been conducted internationally by Ovretveit et al. (2002). Collaboratives are now seen as one of the most effective ways of disseminating new practices and innovations (see, for example, Leape et al. 2006).

Comments on the similarities and dissimilarities between networks and collaboratives would be very welcome.

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