Chapter 31
Bridging Online and Offline Social Networks to Promote Health Innovation:
The CoNEKTR Model

Cameron D. Norman
University of Toronto, Canada

ABSTRACT

Complex problems require strategies that leverage the knowledge of diverse actors working in a coordinated manner in order to address them in a manner that is appropriate to the context. Such strategies require building relationships among groups that enable them to network in ways that have the intensity of face-to-face meetings, but also extend over time. The Complexity, Networks, EHealth, & Knowledge Translation Research (CoNEKTR) model draws upon established methods of face-to-face social engagement and supported with information technology and proscribes an approach to issue exploration, idea generation and collective action that leverages social networks for health innovation. The model combines aspects of communities of practice, online communities, systems and complexity science, and theories of knowledge translation, exchange and integration. The process and steps of implementing the model are described using a case study applied to food systems and health. Implications for health research and knowledge translation are discussed.

"Our Similarities bring us to a common ground; Our Differences allow us to be fascinated by each other."

- Tom Robbins (born 1936); Novelist, Short Story Writer, Essayist

INTRODUCTION

The first decade of the 21st century saw parallel trends that transformed our conceptualization of population health: the shift of burden from acute to chronic disease as the primary driver of healthcare spending; the proliferation of information and communication technologies (ICT) that connect people to ideas and each other on a global scale; and the recognition that social networks impact

health outcomes and human learning in ways never known before. Each of these trends has meant profound changes in the way that healthcare is experienced both by patients and practitioners, inspiring greater integration between prevention and public health and treatment and palliative care. Disappearing are the silos that create distinct separations between these areas – and the actors within them – and in its place an awareness of the importance of relationships as a conduit for problem solving and innovation. Social networks are the medium by which these factors coalesce.

The term 'social' relates to society and organization with others, while 'network' refers to the linking of these 'others' together. Therefore, the relationship between individuals and groups, how these relationships form, and the patterns that emerge from such engagement represent an opportunity to learn about how knowledge is created, shared, and transformed into value – innovation – and how to achieve the largely unrealized promise of knowledge translation (Graham, Logan, Harrison, & Straus, 2006; Kitson, 2009). Networking knowledge is a means of addressing problems of great social and cognitive complexity, such as those with overlapping causes and possible solutions, ones that are highly dependent on context, and require expertise from multiple actors with different perspectives. Networks consider and articulate a full set of possibilities realized in contextual levels and offers a way to conceive of actionable strategies for enhancing and clarifying communication between them. Because social networks operate differently in different contexts, the ability to create networks that fit the context matters significantly (Pescosolido, 2006).

Networks are social structures that human beings use to build solidarity based on similarities and to bridge differences with multiple actors (Capra, 2002; Gilchrist, 2004; B. A. Israel, 1985). Learning and innovation in healthcare and public health depend both on similarity (e.g., disciplines and specialties) and difference (e.g., inter-professional teams). Building strengths on

similarity, or homophiliy, enables knowledge to be consolidated by leveraging the familiar, tacit practices that come from trust, which forms the foundation for networks to develop (Kliener, 2002; Suitor & Keeton, 1997). Connections based on difference promote new learning by extending an individual or group into a new cognitive space and facilitating the emergence of new pattern formation (Page, 2007; Sawyer, 2006, 2008). This chapter will introduce a model developed that addresses the challenges posed by complex problems and leverages the potential that social networks and information and communication technologies (ICT's) present in building bridges across differences, while reinforcing the strength of similarity with the aim of promoting social innovation in health.

The chapter begins with an exploration of the problems facing knowledge translation and innovation in healthcare and public health, followed by the introduction of a model (CoNETKR) developed to address these issues with reference to work done by others in the facilitation of innovation. The chapter concludes with an example of how the CoNEKTR model has been applied in practice and discussion for future applications.

TRANSFORMING KNOWLEDGE INTO ACTION

The health system faces a paradox where more knowledge is being generated through research and practice than ever before and shared through technologies that enable rapid dissemination to broad audiences, and yet much of what is produced is not being transformed into health value in a manner that keeps pace (Balas & Boren, 2000; Best, Moor, et al., 2003; Davis, et al., 2003; Kiefer, et al., 2005). Under the rubric of knowledge transfer and exchange (Koschatzky, 2002; Norman & Huerta, 2006), knowledge translation (Davis, et al., 2003; Estabrooks, Thompson, Lovely, & Hofmeyer, 2006; Graham, et al., 2006), or knowledge integra-

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