

Title: Knowledge production and diffusion in innovative health technologies: The case of care pathways for cancer

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Our proposed paper fits with the overall theme of the conference -- collaborative innovation for change -- since we examine innovation that crosses organizational and professional boundaries, which involves a wide range of stakeholders between academia and health services delivery. Specifically, our proposal best fits with theme 6 -- Innovation & Change through alliances in the service, public and education sectors -- on the basis it focuses upon knowledge management within a networked organization for health service delivery.

The study of knowledge transfer and innovation is an expanding interdisciplinary field in the social sciences, which has yet to find extensive application in health care. Investigators have long recognized that knowledge transfer is not a simple, linear process but occurs through social systems whose complex interactions may facilitate, transform or obstruct transfer in unanticipated ways with unexpected consequences. Studies of innovation and knowledge transfer around health technology exemplify that this is an interactive process subject to institutional influence (Ferlie et al., 2005; Robertson, 2007; Swan et al, 2007a, 2007b).

Our approach is distinctive in combining elements from organizational, and science and technology studies (STS). Our study investigates knowledge dissemination, diffusion and application, and the complex of factors affecting relationships between knowledge generators, knowledge intermediaries and knowledge end-users.

- What are the acknowledged individual or institutional sources of new knowledge?
- How does knowledge transfer from research to practice as socio-technical innovation?
- How do socio-technical innovations disseminate within practice environments?
- Which individuals or institutions act as agents, and in what manner, during the processes of transfer and dissemination?

Cognizant of the need to attend to institutional processes, as well as the effect of institutions (Aldrich, 1999), we use institutional theory to assess how exogenous (e.g. government policy & professional bodies) and endogenous (e.g. history, culture & quality of inter-professional relationships within an organizational boundary) factors impact upon innovation in healthcare. This draws our attention to the need to simultaneously take a distal and proximal view of innovation and knowledge transfer and to acknowledge that innovation is an interactive process. This requires multi-level research to evaluate the interplay between macro-level institutional arrangements, meso capabilities and networks, and organizing and knowledge integration mechanisms, in biomedical innovation at the micro-level (Ferlie et al., 2005; Fitzgerald and Ferlie, 2002; MacGuire, 2002; Robertson, 2007; Swan et al, 2007a,b).

Empirically, our study focuses upon a collaborative endeavour between a government department (Department of Health, England and Wales) and a third sector organization, MacMillan Cancer Support, which sought to improve provision of cancer services through introducing a structured care pathway for those with a suspected family history of cancer – the ‘Kenilworth Model’. This was adapted to local conditions, involving primary care organizations, acute hospitals (secondary care) and regional specialist centres (tertiary care), and crossing professional boundaries (cancer specialists cancer clinicians and nurses, specialist genetics doctors and nurses, general practitioners, managers) and the boundary with users of service), across seven pilot locations in England. Focusing upon in-depth study of four of these pilots, our analysis is based upon 48 interviews with key stakeholders, observation of meetings and relevant documentation, carried out on a longitudinal basis over three years encompassing the development and implementation of the Kenilworth Model.

Key Words: innovation, healthcare, institutional theory, knowledge management

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