Chapter III

Experiences from Health Information System Implementation Projects Reported in Canada between 1991 and 1997

Francis Lau
University of Alberta, Canada

Marilynne Hebert
University of British Columbia, Canada

Canada’s Health Informatics Association has been hosting annual conferences since the 1970’s as a way of bringing information systems professionals, health practitioners, policy makers, researchers, and industry together to share their ideas and experiences in the use of information systems in the health sector. This paper describes our findings on the outcome of information systems implementation projects reported at these conferences in the 1990’s. Fifty implementation projects published in the conference proceedings were reviewed, and the authors or designates of 24 of these projects were interviewed. The overall experiences, which are consistent with existing implementation literature, suggest the need for organizational commitment; resource support and training; managing project, change process, and communication; organizational/user involvement and teams approach; system capability; information quality; and demonstrable positive consequences from computerization.

INTRODUCTION

Canada’s Health Informatics Association, known historically as COACH (Canadian Organization for the Advancement of Computers in Health), has been hosting annual conferences since the 1970’s as a way of bringing information systems (IS) professionals, health practitioners, policy makers, researchers, and industry together to share their ideas and experiences in the use of information systems in the health sector. These conferences usually consist of keynote speakers describing the latest IS trends; presentations of new ideas, key issues and implementation projects; special interest group meetings; and IS vendor exhibits.

One area of ongoing interest for conference participants is the implementation projects reported at the COACH conferences. Considering the high cost involved in planning, implementing, managing, and evaluating health information systems, any successes, failures, and lessons learned from these projects can provide valuable information for future projects. While one can certainly gain insights from the individual implementation projects reported, there has been no systematic effort to examine the cumulative experiences from these projects such as common issues, enablers, and barriers that influenced the implementation process and success.

Over the years, numerous articles have also appeared in health informatics literature on systems implementation. Thus far, it is recognized that people and organizational issues are equally if not more important than technology itself when implementing IS (Lorenzi et al., 1997). Reasons cited for failures include ineffective communication, hostile culture, underestimation of complexity, scope creep, inadequate technology, lack of training, and failed leadership (Lorenzi and Riley, 2000). Anderson (1997) has stressed that IS affect distribution of resources and power as well as interdepartmental relations. As such, successful implementation requires active user involvement, attention to workflow and professional relations, and anticipating/managing behavioral and organizational changes. To date there has been little research done on Canadian experience in health information systems implementation.

This paper reports the findings of our study on outcome of IS implementation projects reported at the COACH conferences in the 1990’s. First, we outline the study approach used. We then describe the results in terms of expectations being met, key implementation issues, system usage and changes over time, and lessons learned. Based on our findings we conclude with a summary of the experiences from these implementation projects, and how they compare with health informatics literature on implementation.
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