



Chapter 6

**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 1990s. 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;

Previously Published in the *Journal of End User Computing*, vol.13, no.4, Copyright © 2001, Idea Group Publishing.

This chapter appears in the book, *Effective Healthcare Information Systems* by Adi Armoni.
Copyright © 2002, IRM Press, an imprint of Idea Group Inc.

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.

15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/experiences-health-information-systems-implementation/9224

Related Content

Perspectives on the Adoption of Electronic Resources for Use in Clinical Trials

Maricarmen D. Planas-Silva and Rhoda C. Joseph (2011). *Healthcare Delivery Reform and New Technologies: Organizational Initiatives* (pp. 19-28).

www.irma-international.org/chapter/perspectives-adoption-electronic-resources-use/50151

A Proposed Speech Discrimination Assessment Methodology Based on Event-Related Potentials to Visual Stimuli

Koji Morikawa, Kazuki Kozuka and Shinobu Adachi (2012). *International Journal of E-Health and Medical Communications* (pp. 19-35).

www.irma-international.org/article/proposed-speech-discrimination-assessment-methodology/66416

Age and Education as Major Determinants of HIS's Adoption

Emad Ahmed Abu-Shanab (2021). *International Journal of Reliable and Quality E-Healthcare* (pp. 76-95).

www.irma-international.org/article/age-and-education-as-major-determinants-of-hiss-adoption/287425

Automated Diagnostics of Coronary Artery Disease: Long-term Results and Recent Advancements

Matjaž Kukar, Igor Kononenko and Ciril Grošelj (2012). *Medical Applications of Intelligent Data Analysis: Research Advancements* (pp. 91-112).

www.irma-international.org/chapter/automated-diagnostics-coronary-artery-disease/67252

Moving to an Online Framework for Knowledge-Driven Healthcare

Bruce Shadbolt, Rui Wang and Paul S. Craft (2005). *Creating Knowledge-Based Healthcare Organizations* (pp. 136-149).

www.irma-international.org/chapter/moving-online-framework-knowledge-driven/7232