



Chapter 2

Experiences in SIS Implementation in UK Healthcare

Stuart J. Barnes
University of Bath, UK

Implementing large strategic IS in the UK health sector has recently become the subject of much debate, as hospitals have undergone wide-reaching government-led institutional reforms involving the introduction of IT. Many of the developments have followed the patterns in the U.S. One such example is that of Case Mix, introduced strategically as part of the Resource Management Initiative and aimed at the facilitation of both clinical and financial audit. Moreover, Case Mix was implemented alongside significant changes in hospital structure and culture, requiring clinicians to get involved in management tasks and decision making within the structure of the hospital, supported by a new information infrastructure.

Case Mix was implemented blanket-fashion throughout many UK hospitals, and the success of such systems has varied significantly. A number of lessons can be learned from the way that the implementation was approached. This chapter stems from a research project focusing longitudinally on the implementation of Case Mix in four UK hospitals. It draws a number of findings from the cases, and importantly, explicates a framework for strategic IS implementation, as generated from the cases and supported by the extant literature. Such a framework has implications for both theory and practice, and assists in the understanding of what is often a dynamic and poorly understood situation.

Previously Published in *Strategies for Healthcare Information Systems* edited by Robert Stegwee and Ton Spil, Copyright © 2001, Idea Group Publishing.

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INTRODUCTION

The implementation of information systems (IS) is an important theme in the literature (Cooper and Zmud, 1990; Keen, 1981; McFarlan, 1981; Swanson, 1988). Much of it appears to suggest a gloomy outlook, with many systems doomed to failure. Indeed, there are many case examples to support this (e.g., Computing, 1993; Beynon-Davies, 1995a; Oz, 1994; Tate, Hunter, McPartlin and Duffy, 1993), and numerous statistics of IS failure (e.g. Lyytinen and Hirschheim, 1987; Willcocks and Lester, 1993). Hockstrasser and Griffiths (1991), for example, suggest that around two-thirds of all large IS implementations are not successful.

The overwhelming focus for most studies of IS has, until recently, been the private sector. However, in the last decade, the public sector in the UK has been the subject of wide-ranging reforms involving the introduction of competitive practices, and significantly, the introduction of IS and information technology (IT) to aid in this task (Brown, 1992; 1995; Beynon-Davies, 1995a). Among these has been the health care sector, which previously had very little in the way of IT infrastructure. Included within this new area of IS implementation, we find systems associated with the National Health Service (NHS) Resource Management Initiative (RMI). The Initiative revolves around cultural and structural change, and the provision of relevant information for clinical and management audit. At the heart of the Initiative are Case Mix systems, which are patient-centered databases for all aspects of hospital operations.

Although it is a large-scale and expensive development and the UK NHS is the largest employer in Europe, Case Mix has received very little attention in the IS literature. The study presented here investigates the organizational changes that influence the successful implementation of Case Mix. It presents some of the results from the study, and in particular, draws a number of important lessons for those attempting to implement IS in healthcare. To this end, it provides a framework for considering IS implementation at a strategic level.

BACKGROUND TO THE RESEARCH

Despite the notable increasing sophistication of information technologies, systems continue to fail either during development, or at the points of implementation and use (Holmes & Poulymenakou, 1995). In the words of Lyytinen (1987):

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