Chapter XIX
Knowledge Characteristics, Knowledge Acquisition Strategy and Results of Knowledge Management Implementations: An Empirical Study of Taiwanese Hospitals

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ABSTRACT

The very fundamental mission of hospital management is to deliver quality healthcare services by utilizing highly specialized medical knowledge and solve other healthcare problems within various resource constraints. Similar to other knowledge-intensive industries which operate in highly challenging business environments, hospitals of all sizes must view the creation, organization, distribution, and application of knowledge as a critical aspect of their management activities. Knowledge management, therefore, represents a viable strategy as hospitals strive to simultaneously provide quality medical services, improve operational efficiency, and comply with governmental documentation and reporting regulations. This study examines the correlation as well as causal relationships between knowledge characteristics, knowledge acquisition strategy, implementation measures, and performance of knowledge management implementations in the context of hospital management. Using primary data collected in Taiwanese hospitals, our analyses showed that the characteristics of knowledge affect the ways in which knowledge management is implemented, and the implementation measure, in turn, has a significant impact on the results of knowledge management implementation.
INTRODUCTION

Hospitals of all sizes are currently faced with a multitude of management pressures, including industry competition, customer satisfaction, shortage of specialized personnel, compliance with government regulation, cost reduction, and the ever-increasing demand for more effective cures (Camilleri & O’Callaghan, 1998; Porter & Teisberg, 2004). In coping with these challenges, hospitals have actively experimented with various management initiatives and programs, such as total quality management and knowledge management, with varying performance results. Emerging as a new multidisciplinary management field, knowledge management (KM) promises to enhance competitive advantage in the highly dynamic knowledge economy by treating valuable and scarce knowledge as a critical organizational asset and managing it in a systematic manner (Sharkie, 2003; Ulrich & Smallwood, 2004). From the knowledge management point of view, many hospital services involve knowledge-intensive processes that are carried out to solve patient health-related problems (Wickramasinghe et al., 2005). Because of the knowledge-intensive nature of healthcare services, much of a hospital’s success depends on effective and efficient creation, organization, validation, dissemination, and application of its highly specialized, medical knowledge and hospital management expertise.

Traditional knowledge management mechanisms in most hospitals typically include morning meetings, apprenticeships, internships, professional seminars, research partnerships with outside research institutions, and other forms of human interaction. Sophisticated information technologies are also being deployed in some hospitals to manage medical images and to capture scarce expertise (e.g., medical expert systems and data mining technologies) (Davenport & Glaser, 2002; Wickramasinghe et al., 2005). The addition of Internet technologies to the portfolio of information processing and management systems further offers a new set of powerful tools for communications and collaboration as hospitals seek to enhance the implementation of their knowledge management initiatives.

In light of the strategic value of highly specialized, professional knowledge, hospitals increasingly recognize a need to more actively manage their intellectual capital. The field of knowledge management provides the frameworks and techniques that are deployed to transform an organization into an adaptive learning system (Leonard-Barton, 1995; Hansen, 1999; Gupta & Govindarajan, 2000; Adams & Lamont, 2003; Awad & Ghaziri, 2004; Becera-Fernandes et al., 2004). These frameworks and techniques emerge from the inquiries conducted and experiences acquired in a variety of contexts; including manufacturing (Kim, Hwang, & Suh, 2003), customer relationship management (Gebert, Geib, Kolbe, & Brenner, 2003), consulting (Sarvary, 1999), retail chain (Tsai, Yu, & Lee, 2005), and healthcare (Daqvenport & Glaser, 2002; Wickramasinghe & Davison, 2004; Ford & Angermeier, 2004; Powers, 2004). Much of the literature, however, has been either case studies or conceptual discussions in nature. Empirical studies based on the primary data collected in the field, however, are important for advancing the field of knowledge management toward maturity.

Motivated by the dearth of empirical inquiries in knowledge management that address issues in hospital management, we conduct this study to identify the relationship between some factors that play a significant role in successful knowledge management implementations in the healthcare environment. Our purpose is to understand how knowledge management is practiced and the result of implementation in this knowledge-intensive sector. We also seek to contribute to hospital management by offering empirical evidence for the value of knowledge management in coping with the multi-faceted management challenges faced by today’s hospitals.