

## Chapter 6.16

# Applying Strategies to Overcome User Resistance in a Group of Clinical Managers to a Business Software Application: A Case Study

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### **ABSTRACT**

User resistance is a common occurrence when new information systems are implemented within health care organizations. Individuals responsible for overseeing implementation of these systems in the health care environment may encounter more resistance than trainers in other environments. It is important to be aware of methods to reduce resistance in end users. Proper training of end users is an important strategy for minimizing resistance. This article reviews the literature on the reasons for user resistance to health care

information systems and the implications of this literature for designing training programs. The other principles for reducing resistance (communication, user involvement, strategic use of consultants) are illustrated with a case study involving training clinical managers on business applications. Individuals responsible for health care information system implementations should recognize that end user resistance can lead to system failure and should employ these best practices when embarking on new implementations.

## **INTRODUCTION**

Traditionally, health care has lagged significantly behind other industries in the use of information technology (Parton & Glaser, 2002). The use of computers in health care has up until recently been primarily to automate the business and administrative functions. Today, a variety of pressures are forcing the health care industry to invest more money and effort into using information technology in clinical settings. New legislation to protect privacy and confidentiality of medical information encourages the development of electronic medical records (US Dept of Health and Human Services, 2002). Concerns over medical errors have led to an increased interest in clinical decision support systems and computer-based physician order entry (Bates et al., 1999; Leapfrog Group, 2000). These developments will lead to more need for direct use of computers by health care providers who are used to manual processes for the same tasks. In addition, many clinicians are now assuming managerial positions in health care where they will be expected to use traditional business applications as well (Merry, 1999). Not only are these new managers not used to automating some of these tasks, but as clinicians, they have not seen use of the computer as part of their professional role. As a chairman of a clinical department once said, "What do I have a secretary for?"

The reluctance to use the new systems may be perceived as resistance, or in fact there may be real resistance to the changes that information technology makes in the clinical work processes (Worthley, 2000). In either case, administrators, information technology personnel, or clinicians charged with promoting the use of information technology in the health care environment may encounter more resistance than is found in other environments, so added to the issues of training end users that are common across a variety of settings, health care project managers also need to be aware of methods to reduce resistance in end users (Kaplan, 1997).

User resistance is a common occurrence when new information systems are implemented within a health care organization. There is also a sizable amount of literature on health care system implementations to explain and give insight into some of the reasons behind this resistance and to suggest strategies for overcoming it (Ash et al., 2000; Jiang et al., 2000; Lauer et al., 2000; Lorenzi & Riley, 1995; Lorenzi et al., 1997, 2000; McNurlin & Sprague, 1998; Worthley, 2000). The principles advocated in these studies can be used to develop a variety of end user training programs in health care settings. We will discuss this literature and the implications for design of training programs and will illustrate the application of these principles with a case study that involved training clinical managers on business applications.

## **POSSIBLE EFFECTS OF USER RESISTANCE**

When computers were first introduced into the health care setting, the technical issues were the most important to address, but as Lorenzi et al. (1997) discuss, now that many technical issues have been solved the managerial, organizational and "people" issues are equally, if not more, important. Worthley (2000) attributes the failure of many system implementations to the failure to properly address user resistance. He discusses five different forms that resistance can take: sabotage of computer equipment; employees being absent or late to work; "badmouthing" the system, not using the new system and continuing to use the old system; and data tampering (Worthley, 2000, p. 170).

## **REASONS FOR USER RESISTANCE**

Kaplan (1997) discusses some of the causes of resistance to information systems. She mentions "user-centered" theories, which "consider resis-

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