

Chapter 4.4

Perceptions of an Organizing Vision for Electronic Medical Records by Independent Physician Practices

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ABSTRACT

Adoption and usage rates of healthcare information technology (HIT) in general and electronic medical records (EMR) in particular are below expectations even though both show potential to help solve pressing problems plaguing the U.S. healthcare system. This research explores the role an organizing vision (OV) (Ramiller & Swanson, 2003) plays in shaping independent physician practices' (IPP) perceptions of EMRs and hence their interest in adopting and using the technology. This paper reports on an OV for EMRs by using a mail survey of IPPs and uses factor analysis to examine structural properties and content of the OV among the practices. Contributions to theory include exploring the applicability of Ramiller and Swanson's (Ramiller & Swanson, 2003) OV on HIT innovations in healthcare research. Contributions to practice include empowering HIT

decision makers with a model for addressing the introduction of a technology innovation (EMR) into an independent physician practice.

INTRODUCTION

The Advanced Technology Program (ATP) of the National Institute of Standards and Technology (NIST) promotes using information technology (IT) systems in the healthcare industry as a means to deliver substantial cost savings, to improve the quality of healthcare, and to capture global market share of new and improved products and services (NIST, 2005); the Institute of Medicine (IOM) highlighted IT as integral to improving healthcare (IOM, 2001); and, the U.S. Government in general has promoted increased use of health information technology (HIT) (WHSOU, 2008, 2007) and in particular has outlined a plan that seeks to ensure

that most Americans have electronic health records (EHR) by the year 2014 (WHSOU, 2006, 2005, 2004). In addition, Health and Human Services (HHS) Secretary Mike Leavitt recently described how electronic medical records (EMR) can help change the macroeconomics of the way small physician practices are reimbursed thereby facilitating improvement in the delivery of healthcare (Burda, 2008).

Despite these high expectations for the value of IT in healthcare, HIT use in the U.S. is low in the sheer number of adopters as well as in the extent of actual use (Poon et al., 2006; Johnson, Pan, & Middleton, 2002). Studies from the Center for Studying Health System Change (HSC) show wide variation in IT adoption across physician practices, particularly by physician practice setting, size, and specialty. That is, in the 2004 to 2005 timeframe, U.S. physicians in traditional practice settings i.e., primarily solo or relatively small group practices where the vast majority of Americans receive care, reported that their practice generally confined IT use to five clinical function areas: obtaining treatment guidelines (65%), accessing patient notes (50%), writing prescriptions (22%), exchanging clinical data with other physicians (50%), and exchanging information with hospitals (66%) (Cory & Grossman, 2007). Since only those physicians with access to IT for all five of these clinical activities are considered to have an EMR the issue of adopting an EMR based on lack of support is an important issue for small practices. That is, typically the highest levels of IT support for patient care are found in staff- and group-model health maintenance organization (HMO) practices, followed by medical school faculty and large group practices (Johnson, Pan, & Middleton, 2002).

In particular, the adoption and use of EMRs by independent physician practices is well below expectations. For example, in a random survey of nonfederal, office-based physicians providing direct patient care, Burt et al. (2007) found that just 24% of physicians used EMRs in their

office-based practices; in a survey of primary care physicians, Menachemi and Brooks (2006) found that 24% overall reported electronic health record (EHR) use in the office; and, in a national, representational survey of physician practices Gans et al. (2005) found that just 14% of practices overall used EMRs. In addition, whereas recent estimates of EMR adoption indicate that the actual number of adoptions has increased from about 105,000 physicians to 130,000 physicians, this increase still represents just approximately 20% of the overall general physician population (iHealthBeat, 2005).

This apparent variation in IT adoption in general and low EMR adoption in particular across the community of independent physician practices, provides a fertile opportunity for research, from both theoretical and practical perspectives. This paper thus reports on a survey of the perceptions of EMRs by independent physician practices by extending the theoretical model of organizing visions as developed by Ramiller and Swanson (2003). That is, Swanson and Ramiller (1997) posit that a diverse inter-organizational community creates and employs an organizing vision of an information system innovation that is central to its early, as well as later, diffusion. In this context, an organizing vision is a 'focal community idea for the application of information technology in organizations' (Swanson & Ramiller, 1997, p. 460). By utilizing the theoretic concept of an organizing vision for IT innovations (Ramiller & Swanson, 2003; Swanson & Ramiller, 2004, 1997) this paper analyzes how small physician organizations perceive the discourse surrounding EMRs in terms of interpretability, plausibility, importance, and discontinuity with existing clinical and administrative practices and technologies. In the next sections of this paper the organizing vision concept and its applicability to EMR adoption is outlined. Next, survey method and findings are described. Finally, a discussion of the implications and future steps in this research are presented.

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