

A synthesis of HCMR's health information technology articles (2000–2011)

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Abstract:

The current issue of HCMR features articles invited to a special call for articles on “Health Information Technology and Management in the Era of Reform.” The articles build on the strong heritage of HCMR authors whom have long studied health information technology (HIT) issues in the organizational context.

Keywords: health care management | health information technology | electronic medical records | hospital administration

Article:

The current issue of HCMR features articles invited to a special call for articles on “Health Information Technology and Management in the Era of Reform.” The articles build on the strong heritage of HCMR authors whom have long studied health information technology (HIT) issues in the organizational context.

Over a decade ago, in the Fall 2000 issue of HCMR, Lawton Burns wrote an invited commentary that outlined a research agenda for health services management. He began outlining many research questions surrounding HIT, including the impact of electronic medical records (EMR),

implications of E-business, and the impact of the Internet on business-to-business and business-to-consumer interactions in health care organizations (Burns, 2000). A few issues later, HCMR authors began addressing the research gaps identified by Burns, and among the first were Payton and Ginzberg who explored “Interorganizational Health Care Systems Implementations: An Exploratory Study of Early Electronic Commerce Initiatives” (Payton & Ginzberg, 2001). Also in 2000, Wholey and colleagues reported on “The Diffusion of Information Technology Among Health Maintenance Organizations” in the Spring issue of HCMR (Wholey, Padman, Hamer, & Schwartz, 2000)—a topic that seems equally as applicable to today’s health care environment.

One of the most frequently cited HCMR articles from the new millennium’s first decade, “Explaining Diffusion Patterns for Complex Health Care Innovations” (Denis, Hebert, Langley, Lozeau, & Trottier, 2002), clearly anticipated both the research and practical challenges that new HIT would create. Taking up the challenge, authors began investigating issues surrounding telemedicine (Robinson, Savage, & Campbell, 2003; Turner et al., 2003), clinical information systems (Bar-Lev & Harrison, 2006; Weiner, Savitz, Bernard, & Pucci, 2004), barcode technology for reducing medical errors (Pinkerton, 2004), and the forging of E-health partnerships (Caro, 2005) in the early to mid 2000s. In 2004, HCMR published a methodological article that examined an approach for measuring HIT sophistication in hospitals (Burke & Menachemi, 2004), which was later used by several HCMR authors to examine factors influencing HIT adoption (Wang, Wan, Burke, Bazzoli, & Lin, 2005) and the relationship between HIT adoption and hospital quality (Menachemi, Chukmaitov, Saunders, & Brooks, 2008). As the decade progressed, researchers were able to provide managerial insights into where HITs were likely to be successfully adopted in medical practice (Kralewski et al., 2008) and hospital settings (Harrison & Kimani, 2009).

The April/June 2006 issue of HCMR was the first to feature two articles on HIT topics: one that examined HIT systems for strategic planning (Killingsworth, Newkirk, & Seeman, 2006) and another focusing on SMS reminders for “no shows” at an outpatient clinic (Milne, Horne, & Torsney, 2006). Other articles that year examined factors that influence HIT adoption by hospitals (Jaana, Ward, Pare, & Sicotte, 2006) and how organizational support for technology can influence job satisfaction (DelliFraine, Dansky, & Rumberger, 2006). In the following few years, HCMR authors examined HIT issues surrounding outsourcing decisions (Menachemi, Burkhardt, Shewchuk, Burke, & Brooks, 2007), the effect of payer mix on the adoption of HIT by hospitals (Menachemi, Hikmet, Bhattacharjee, Chukmaitov, & Brooks, 2007) and physicians (Menachemi, Matthews, Ford, & Brooks, 2007), and the effect of HIT on firm level performance (Thouin, Hoffman, & Ford, 2008).

In 2008, Li et al. examined the role of multihospital systems in the decision to adopt EMRs (Li, Bahensky, Jaana, & Ward, 2008), and Abdolrasulnia and colleagues studied how market forces are associated with physician EMR adoption (Abdolrasulnia et al., 2008). Later that year, the aforementioned Kralewski article reported on physician factors influencing HIT usage (Kralewski et al., 2008). In 2009, Davis et al. studied HIT adoption in nursing homes using national data (Davis et al., 2009). Soon thereafter, authors began focusing again on physician practices with Menachemi and colleagues examining the role of HIT in physician practice satisfaction (Menachemi, Powers, & Brooks, 2009) and Bramble et al. examining physician characteristics associated with adoption (Bramble et al., 2011). Calciolari and Buccoliero examined information integration in health care organizations by previewing a case in the European health system (Calciolari & Buccoliero, 2011).

More recently, HCMR authors have examined issues surrounding electronic prescription and order entry systems in hospitals (Kazley & Diana, 2011) and medical practices (Au, Menachemi, Panjamapirom, & Brooks, 2011). Moreover, authors have studied the patient experience in online health communities (Nambisan, 2011), the experiences of early adopters in long-term care facilities (Cherry, Ford, & Peterson, 2011), and market factors associated with HIT management strategies in hospitals (Menachemi, Shin, Ford, & Yu, 2011).

From 2000 to 2011, HCMR has worked toward improving our understanding of how HIT affects organizations and providers using both qualitative and quantitative research designs. The use of case studies and small samples to describe early adopters' experiences are valuable for helping to inform practitioners on how to manage the HIT adoption and implementation processes. On the other hand, the empirical research has helped to create taxonomies of HIT adoption that describe the market and organizational types where HIT is both succeeding and experiencing challenges. Both streams of research have helped to inform policymakers' program designs to promote HIT adoption. The major new research streams that are emerging are focused on HIT's impacts on costs, care quality, and consumer satisfaction.

The Health Information HITECH Act of 2009 (Blumenthal, 2009) created new health care organizations to promote HIT adoption and facilitate medical information sharing among providers—Regional Extension Centers and Health Information Exchanges, respectively. The legislation also gave rise to the federal “Meaningful Use” incentive and reward program. The ability and willingness of health care organizations to meet the program's goals will undoubtedly lead to several new streams of research related to HIT. In addition, the passage of the Patient Protection Accountable Care Act (Berwick, 2011) envisions new patient-centered medical homes and accountable care organizations. These new organizations also represent entirely new

management challenges and research opportunities. Lastly, the focus on consumers as fully engaged participants rather than passive recipients of care will challenge traditional research modalities as the use of personal health records and social media (e.g., Twitter, Facebook, and Yelp!) alters information control and decision-making paradigms.

All in all, the five HIT studies in the current issue add to the over 32 HIT articles published in HCMR in the past decade and point to many areas of future research.

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