## Chapter 85

# The Politics of Establishing ICT Governance for Large-Scale Healthcare Information Infrastructures

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### **ABSTRACT**

In Norway, the focus on interoperability and communication across healthcare practices has increased the need to connect ICT portfolios at different levels of healthcare, into large-scale information infrastructures (II). Governing healthcare practices is exceptionally complex, due to the diverging goals and policies of the heterogeneous actors involved. Establish well-functioning ICT governance organizations to handle these large infrastructures is therefore important. Using information infrastructure theory, and governance literature from the IS field, this paper contributes with empirical insight to the longitudinal and political process of establishing ICT governance in a healthcare context, reporting from one of Norway's largest health ICT projects, situated in the North Norway Regional Health Authority in 2012–2016. Our focus was on the following research questions: How does organizational politics shape the process of establishing an ICT governance organization in a heterogeneous healthcare environment, and what does it take to establish such ICT governance organization?

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### INTRODUCTION

Standardization of technology and work processes, to reach seamless integrations and semantic interoperability in Norwegian healthcare, has gained increased focus over the last years. The growing need for inter-organizational collaboration (Croteau, Bergeron, 2009; Dahlberg & Helin, 2014) and communication has raised the need for regional information and communication technology (ICT) portfolio. The role of the EPR systems, moving from local information storage systems, to large-scale user-centered work tools, has been particularly important. Consequently, the ICT portfolios have expanded in size and complexity. Hence, well-functioning ICT governance organizations at different levels of healthcare practices has gained increased focus. ICT governance include how to design and implement effective organizations by creating flexible ICT and information system (IS) structures and processes (Patel, 2002). The overall goal is for governance organizations to ensure successful deliverance of healthcare services (Beratarbide & Kelsey, 2009). There are increasing evidence related to establishing a connection between well-organized governance of health care organizations, and improved organizational performance (Tabish, 2012). However, hospitals and health systems struggle with matters of governance, particularly related to care standardization, and quality improvement (Tabish, 2012).

When making an effort to regionalize and standardize ICT portfolios, ICT governance organizations are important for maintaining the regional focus and handling challenges along the way. Traditionally ICT governance organizations were run in a top-down manner (Weill & Ross, 2004), this has however rarely proven efficient or successful for heterogeneous healthcare practices (Constantinides & Barrett, 2014; McGinnis, 1999). Therefore, a pressing need for shifting to a more bottom-up governance structure, focusing on the dynamic interactions between technical and social elements in ICT design (Constantinides & Barrett, 2014) has raised. Given the increased ambitions of information sharing, healthcare is characterized as institutions with different goals and policies, different ICT portfolios in play, and, stakeholders with different interests. Hence, it is necessary to look at the complexity of ICT governance, and the challenges of governing ICT portfolios at regional levels of healthcare. Introducing inter-organizational governance is an attempt to overcome the lack of interoperability and standards in healthcare (Dahlberg & Helin, 2014).

The contribution of this paper is to provide empirical insight to the longitudinal and political process of establishing an ICT governance organization within a healthcare context. Based on this, we ask the following research questions: How does organizational politics shape the process of establishing an ICT governance organization in a heterogeneous healthcare environment, and what does it take to establish such ICT governance organization?

We have gathered our empirical data, by following the steps of a regional initiative in the North Norwegian Health Authority. In 2012, this health region completed a large tender, and decided to regionalize their new ICT portfolio. To carry out these changes they established a regional project (dubbed BigProject), to run from 2012-2016. BigProject was one of the largest ICT investments in Norwegian healthcare, and the main goal of the project was to establish a regional ICT portfolio as a foundation for regionally standardized patient pathways, decision support, and integrations between clinical ICT systems (Christensen & Ellingsen, 2013). A regionalization, including standardizing EPR workpractice, was necessary requirements for reaching such goals, and for enabling the Health Authorities to better administrate and compare the hospitals in the region. In addition, the BigProject worked in close collaboration with the largest EPR vendor in Norway, on developing a more structured and interoperable EPR system, in order to communicate across heterogeneous healthcare practices (Nasjonal-IKT, 2012).

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