Exploring ICT Enabled Networking in Hospital Organisations

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Abstract

This paper describes an exploratory study of new organisational forms in hospitals. The study focuses on ICT-enabled networking in hospital organisations. Two Dutch hospitals (one general and one categorical) and a German hospital (university) were analysed. Hospitals develop through different levels of networking and phases of organisational focus. Strategic drivers and incentives are improvement of efficiency and effectiveness of the primary care process. Enabling conditions are a clear hospital strategy and an open and flexible hospital information system that supports network transactions and processes. The design and functioning of the network is conditioned by (a) the not-for-profit market, (b) the organisational focus, and (c) the involvement of internal and external stakeholders. The measurability of performance increases as the organisational focus evolves. More research is called for to understand the complexity and dynamics of hospital network organisations.

1. Introduction

The health care sector is experiencing fundamental change, especially in and between hospitals (Tanriverdi and Venkatraman, 1999 [18]; Spil et al, 1999 [17]). While the role of information and communication technology (ICT) is certainly not new, the increasing dynamics of organisational and socio-economic developments, and the rapid technological advancements do emphasise the complexities and dynamics of a changing health care environment (Peterson et al, 1999 [11]).

Hospitals are subject to constant impulses from the national government and insurance companies to improve efficiency and effectiveness. For example, budget restrictions by the central and local government make it necessary to improve efficiency and to reduce costs; the general need to improve patient care makes it necessary to improve effectiveness. Hospitals are now becoming aware of the potential value of integrated services and the collaborative advantage of networking (Smits and Van der Pijl, 1999 [14]).

In this paper, we focus on new ICT-enabled network organisational forms in hospitals. This study was conducted as part of a large-scale research programme on network organisations in health care and other industries. The ultimate aim of the research is to understand and improve the effectiveness of ICT-enabled networking in hospital organisations.

More specifically, the research questions are:
(i) What are the strategic, organisational and performance features of hospital network organisations?
(ii) What are the relationships and roles of the various stakeholder groups?
(iii) What is the role of ICT in hospital network organisations, and how is ICT organised and managed?

Section 2 provides a theoretical background on network organisations in general and describes the research model underlying this exploratory study. The different organisational foci in hospitals, and the roles of stakeholders and ICT are outlined. The case studies in three ICT-enabled network hospital organisations are described and analysed in Section 3. More specifically, in Section 4, the changing stakeholder coalitions and the strategic role of ICT are discussed. This paper concludes with the main lessons learned and directions for future research (Section 5).

2. Theoretical Background

In the growing literature on network organisations, different definitions and typologies can be found for describing a network organisation. In general, three