

## Chapter 49

# The Development of the English National Health Information Infrastructure

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### ABSTRACT

*This chapter draws on a secondary analysis of publicly available data on the development of the English National Program for IT (NPfIT). This analysis focuses on the multilevel context, action arena, and outcomes in the NPfIT case, placing great emphasis on the property rights put forward and negotiated between key stakeholder groups. The chapter concludes with an analysis of the consequences of these negotiations for the English NPfIT and other such national information infrastructure projects.*

### INTRODUCTION

Unlike the case in Greece and other European nations, England has kept its distance from European policies – despite an inevitable process of Europeanization (see Schneider & Aspinwall, 2001). This is particularly true in the English public healthcare sector where information and communication initiatives have always been driven at the national level within the context of the English National Health System (NHS).

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Alongside a government agenda of public sector reform, information and communication initiatives within the English NHS have increasingly been perceived as critical in making the NHS more efficient and cost-effective. This is evident through the annual expenditure on IT and services by the English government that has doubled since 1999, reaching a figure of around £14 billion, which is the highest in Europe (NAO, 2004). The growing use of large external IT service providers and smaller more specialized firms see much potential in developing skills and capabilities in the healthcare sector. The split between public

(in-house) and private (external) markets for IT services now stands at around 55 percent and 45 percent respectively.

In 2002, the government pledged to spend around £6.2 billion on a National Programme for Information Technology (NPfIT) with the purpose of delivering four critical elements: (1) NHS Care Records Service, (2) Electronic Appointment Booking, (3) Electronic Transmission of Prescriptions, and (4) Electronic Transfer of Digital Images (e.g. X-rays and scans). The NPfIT is now the world's largest civil IT programme (Connecting for Health, 2004, pp. 33).

Despite intentions, the history of introducing IT into the NHS has produced varied outcomes (NAO, 2004, 2006). This variation can be explained by examining the tensions created by the infrastructural ideal of a government-controlled, standardized form of provision of infrastructure services, on the one hand, and the splintering of that ideal through market mechanisms and private involvement on the other. In particular, during its earlier phase, the NHS can be seen to be dominated by a concern with delivering free, standardized, integrated healthcare services to all at the point of use (Klein, 2000). After the reforms introduced by the two Blair governments in the 1990s, and the discourse of the "Third Way," the NHS can be seen to be dominated by an obsession with innovation and change through an encouragement of competitiveness among healthcare service providers (Greener, 2005). The NPfIT was conceptualized in the context of this second era, but – paradoxically – driven primarily by the logic of the first era, i.e. a centrally controlled information infrastructure to satisfy an increasing but *varied* demand for healthcare services according to the medical specializations and needs of each healthcare organization.

This chapter explores the various problems created as a consequence of this paradoxical development. The next section provides an analysis of the historical evolution of policies used to bring the NPfIT into existence by examining

broader political discourses in the English NHS toward improving the provision of public sector healthcare services. Subsequently, the following section provides an analysis of publicly available data presented before the Committee of Public Accounts (CPA) assigned to examine the progress made by the English Department of Health in implementing the NPfIT (HC, 2007a, 2007b, 2007c, 2009). This analysis will focus on the multilevel context, action arena, and outcomes in the NPfIT case, placing great emphasis on the property rights put forward and negotiated between key stakeholder groups. The chapter will conclude with an analysis of the consequences of these negotiations for the English NPfIT and other such national information infrastructure projects.

## **THE ENGLISH NATIONAL HEALTH SYSTEM**

### **The Early NHS (1948-1997)**

After the Beveridge report (Beveridge, 1942), the concept of a centralized, integrated, government-funded hospital service was established and in 1948 the newly-elected government created a National Health Service (NHS). The fundamental principles underlying the NHS were, and still largely are, that services would be funded predominantly from general taxation and that they would, in general, be free at the point of use, and comprehensive and available to all, regardless of means to pay.

To support this initiative, a tripartite governance structure was put in place, namely, government owned hospitals, a national network of general practitioners (GP), and community or personal health services. The three strands were financed centrally but managed separately.

Firstly, hospitals were divided into 'natural' districts which were overseen by Hospital Management Committees, which in turn reported to Regional Hospital Boards that were meant to be

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