# Chapter 4.15 A Centrist Approach to Introducing ICT in Healthcare: Policies, Practices, and Pitfalls

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# **EXECUTIVE SUMMARY**

The challenge to provide a nation-wide healthcare service continues unabated in the 21st century as politicians and managers drive through policies to modernize the UK National Health Service (NHS). Established around 60 years ago to offer free healthcare at the point of delivery to all citizens, the NHS now accounts for the largest portion of public expenditure after social security, with total spending around £84 billion in 2006/2007. Over the past 3 decades, the political agenda within healthcare has moved from one of professional dominance, where clinicians and their representative bodies dominated the leadership and management of healthcare organisations, to one where politicians have imposed new ideas in the form of market mechanisms and the "new public management" which extend the use of private sector firms. The political justification for these reforms is to make the NHS more efficient and cost effective and to develop an ethos of patient choice.

## INTRODUCTION

The challenge to provide a nation-wide healthcare service continues unabated in the 21<sup>st</sup> century as politicians and managers drive through policies to modernize the UK National Health Service (NHS) (Harrison, 2004). Established around 60 years ago to offer free healthcare at the point of delivery to all citizens, the NHS now accounts for the largest portion of public expenditure after social security, with total spending around £84 billion in 2006/2007 (National Audit Office, 2006a, 2006b). Over the past 3 decades, the political agenda within healthcare has moved from one of professional dominance, where clinicians and their representative bodies dominated the leadership and management of healthcare organisations, to one where politicians have imposed new ideas in the form of market mechanisms and the "new public management" which extend the use of private sector firms (Burgoyne, Brown, Hindle, & Mumford, 1997; Callaghan & Wistow, 2006). The political justification for these reforms is to make the NHS more efficient and cost effective and to develop an ethos of *patient choice* (Department of Health, 2002).

Described as a *monolithic* organization (Mohan, 2002), implementing business and technical change in the NHS is difficult to manage given the competing interests of key stakeholders: politicians, clinicians, hospital managers, administrators, pressure groups, and patients (Pollock, 2005). A significant policy challenge currently facing the NHS is the implementation of a 10-year (£12.4bn estimated cost) government-led initiative to provide a National Programme for Information Technology (NPfIT) as a significant part of the NHS modernisation agenda (National Audit Office, 2006a).

The NPfIT comprises four main elements, each of which constitutes a nationwide large-scale information technology (IT) implementation: (1) a National Care Records Service for capturing, storing, retrieving, and modifying patient medical records on a national database; (2) the Choose & Book system, where GPs and patients can book hospital appointments using a computer system; (3) the Picture Archiving and Communications System (PACs) to capture and send digital images of x-rays and scans; and (4) an Electronic Prescription Service (EPS) to enable patients to collect their prescriptions from hospital and high street pharmacies more efficiently.

While NPfIT represents a serious commitment from government to use IT to drive through public sector reform, the history of embarking on large-scale public sector IT projects is mixed. A recent National Audit Office Report (2006b) identified 24 successful IT-enabled business change projects, but recognised that other public sector IT projects have not been successful. Criteria for the successful evaluation of projects included: senior management commitment, robust procurement processes, and carefully matching user requirements with desired benefits. These findings suggest that evaluating the implementation of NPfIT must be placed in the wider context of policy-making, procurement, processes, and people, and not simply examined as an isolated "technical" initiative introduced across healthcare organisations. This is supported by prior research which shows that evaluating the implementation of large-scale IT projects is a complex task which involves a combination of clinical, managerial and technical expertise, particularly if they are designed to transform or "re-engineer" existing clinical and/or administrative working practices (McNulty & Ferlie, 2002, 2004; Willcocks & Currie, 1997; Wyatt, 2005).

By tracking cross-national public policy on information and communication technology (ICT) over the past 2 decades, we observe the growing importance of linking ICT as a "change agent" for modernising publicly-funded healthcare services. In the U.S., research studies have focused upon introducing IT-enabled business change in healthcare, noting that conflicts may arise between stakeholder groups which resist changing highly institutionalized working practices (Scott, Ruef, Mendel, & Caronna, 2000). Similarly, in the Netherlands, Sweden, and UK, cost-containment programs and healthcare system reorganisations have been vigorously implemented with outcomes both expected and unexpected (Harrison, 2004).

This study focuses on the policies, practices, and pitfalls of introducing NPfIT, which is a centrist and politically-driven initiative intended to *"help deliver a better NHS that gives public and patients services that fit the twenty-first century"* (Department of Health, 2002, p. 2). We begin by looking at the policy antecedents of NPfIT, which led to its launch in 2002. We then discuss a case study on the electronic prescription service, 13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

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