Chapter X
Interpretive Flexibility Along the Innovation Decision Process of the UK NHS Care Records Service (NCRS): Insights from a Local Implementation Case Study

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ABSTRACT

Interpretive flexibility is a term used to describe the diverse perspectives on what a technology is and can or can not do during the process of technological development. In this chapter, we look at how interpretive flexibility manifests through the diverse perceptions of stakeholders involved in the diffusion and adoption of the NHS Care Records Service (NCRS). Our analysis shows that while the policy makers acting upon the application of details related to the implementation of the system, the potential users are far behind the innovation decision process, namely at the knowledge or persuasion stages. We use data from a local health authority from a county close to London. The research explores, compares, and evaluates contrasting views on the systems implementation at the local as well as national level. We believe that our analysis is useful for NCRS implementation strategies, in particular, and technology diffusion in large organisations, in general.
INTRODUCTION

With medical errors becoming a cruel reality in the provision of healthcare worldwide, the role of information technology in preventing those errors becomes predominant. It is recognised that more people die every year due to medical errors than from vehicle accidents, breast cancer, or AIDS (Kohn, et al. 2000). The American Hospital Association CDER (2004) relates the vast majority of medication errors to lack of appropriate information and processes such as:

- Incomplete patient information
- Unavailable drug information
- Miscommunication of drug orders due to poor handwriting, similarly named drugs, misuse of zeroes and decimal points, confusion of metric and other dosing units, and inappropriate abbreviations
- Lack of appropriate labelling
- Environmental factors, such as lighting, heat, noise, and interruptions that can distract health professionals from their medical tasks.

One way to reduce medical errors is to make efficient, accurate, reliable medical decisions, based on reliable and up-to-date information or patient records. Integrated patient records can reduce medical errors by using information technology (Booth, 2002). Medical errors can be reduced with the provision of order entry systems with computerized prescriptions and using bar-coding for medications, blood, devices, and patients. In order to avoid the medical errors, medical centres are investing in computerized patient records, bringing patients and clinicians within the ambit of an integrated health care system that provides real-time patient records. Nelson (1998) cites the American Medical Association (AMA) as stating that 30% of all patient visits are completed without access to the patient’s chart. Access anytime anywhere to patient information, by the concerned and authorized persons, is the key concept of computerized patient records. Medical errors are reduced when all hospitals implement proven medication safety practices using computerized medication lists and health care providers can readily see patient medications and avoid duplications of tests.

In this article, we are looking at the diffusion and adoption of the NHS (National Health Service) Care Records Service (NCRS) in the United Kingdom, which has the potential to support healthcare professionals by offering an integrated electronic patient record system that would potentially reduce medical errors. It is worth mentioning that the medical care in the United Kingdom is a social service and not fee-paid as in other countries such as the United States. This has great implications for the modernisation of the health care system, which is of high political importance and one of the main priorities in the United Kingdom’s government agenda. This service is one of the four key deliverables set out in the NHS IT procurement strategy “Delivering 21st Century IT Support for the NHS,” published in June 2002. NCRS is a portfolio of services covering the generation, movement, and access to health records, which includes electronic prescribing in hospitals and workflow capacities to manage patients’ care pathways through the NHS. Its benefits include convenience, integration of care, improving outcomes using evidence, supporting analysis, and improving efficiency (NHSIA, 1998). With estimates that 25% of nurse and doctor time is taken up collecting data, and the potential increase in speed and efficiency of communication, the benefits appear very straightforward with the promise of “seamless care” (NHSIA, 1998).

The proposed system will work by assisting all healthcare professionals and other prospective users. Whenever they log on to the system, they will be presented with a personal home page permitting them to combine a number of screens. Then, they will be in a position to look