

Implications of Changes  
In The National Health Service  
In England  
For The United States

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Walker Sullivan Report

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## INTRODUCTION

The National Health Service (NHS) in England was established in 1948 for the purpose of providing healthcare to all citizens regardless of their ability to pay. Taxpayer revenues have funded the health service which is divided into three service areas:

- Hospitals;
- Family doctors, dentists, opticians and pharmacists; and,
- Local authority health services, including community nursing and health visiting.

The NHS is highly valued by the population it serves as no one is denied medical care. Access, however, has historically been an issue. Approximately one-quarter of the population purchases private health insurance either through their employer or privately. Private insurance has guaranteed those that can afford it faster service and better quality facilities. This has historically taken the pressure regarding access off of the NHS, since those that want better service can purchase it independently.

The core principles for the NHS include <sup>(1)</sup>:

- The NHS will provide a universal service for all based on clinical need, not ability to pay;
- The NHS will provide a comprehensive range of services;
- The NHS will shape its services around the needs and preferences of the individual patients, their families and their care providers;
- The NHS will respond to the different needs of different populations;
- The NHS will work continuously to improve quality services and to minimize errors;
- The NHS will support and value its staff;
- Public funds for healthcare will be devoted solely to NHS patients;

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<sup>(1)</sup> [http://www.nhs.uk/England/About the Nhs/CorePrinciple.cmsx](http://www.nhs.uk/England/About%20the%20Nhs/CorePrinciple.cmsx)

- The NHS will work together with others to ensure a seamless service for patients;
- The NHS will help to keep people healthy and work to reduce health inequalities; and,
- The NHS will respect the confidentiality of individual patients and provide open access to information about services, treatment and performance.

Although the NHS is highly valued by the population, by the turn of this century there was growing dissatisfaction with access and the quality of services provided. In response, in July of 2000, a plan was developed that increased funding to improve:

- Information for physicians, staff and patients;
- Availability of hospitals, beds, doctors and nurses;
- Waiting times for hospital and doctor appointments;
- Environment in existing facilities;
- Care for older people; and,
- Incentives for rewarding best performance.

In 2001, the Secretary of State for Health launched the NHS Modernisation Agency to reform the way the NHS works, putting patients and staff at the heart of the NHS; offering faster, more convenient services and more choice in patient services.

In order to accomplish the desired changes, specific initiatives have been undertaken in:

- Information technology;
- Finance and reimbursement;
- Patient service standards; and,
- Quality of care.

The major focus of my visit to England was to review the information technology changes being made and to assess the implications for the United States. However, given the magnitude and the interconnectedness of the other changes, these will be briefly addressed as well.

## **ROLE AND IMPACT OF THE INFORMATION TECHNOLOGY**

Until 2000, there was no common framework for information management across the entire National Health Service in England. At issue was how to deliver services to the people when and where they wanted them. Prior to this time, healthcare IT was accomplished mainly through local initiatives. There was a lack of standards across the system and funds were spent on other priorities.

“In February, 2002, a meeting with the Prime Minister secured that most vital ingredient in any corporate IT development, namely support from the very top. The meeting endorsed the need for a dramatic increase in funding, a shift towards a centrally driven, standardized, performance – managed implementation and an initial focus on four elements. These were a high capacity infrastructure to support the first three applications, namely electronic prescribing, electronic booking and most challenging, a longitudinal electronic health record.”<sup>(2)</sup>

After this key commitment, a decision was made to appoint a Director General of IT.

“Delivering 21<sup>st</sup> Century IT was launched by Lord Hunt, Minister of Health, who was responsible for IT in May of 2002. It was presented as being essential in order to:

- Improve the patient experience and the quality of care;
- Support service reconfiguration and frontline clinicians in delivering patient-centered care;
- Improve the capacity of the NHS to deliver change and reform; and,
- Reform working and clinical practices.

Additional central funding for IT was announced in late 2002: 400 million pounds for 2003/2004, 700 million pounds for 2004/2005, and 1.2 billion pounds in 2005/2006. This funding was additional to local investment, currently running at about 850 million pounds a year from baseline allocations.

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<sup>(2)</sup> Connected Health, “Developments in direction and delivery of IM & T for the National Health Service in England”, Sir John Pattison, Director of R&D, and Dr. Peter Drury, Head of Information Policy, Department of Health, England, p. 80-89

In aggregate, it is estimated that it will cost 6.2 billion pounds over ten years to make England the most advanced electronic health system delivering:

- Electronic medical records;
- Prescription transfer;
- Digital Imaging (PACS); and,
- Online booking and scheduling.

England was divided into 5 geographic clusters for the purposes of contracting. Wales and Scotland are not part of the current effort. Contracts for clinical information systems are with IDX, Cerner and I-Soft. Each hospital will implement its own system with data rolled up to a national spine for the collection of clinical information at the national level. Standards will be set to bridge organizational and geographic barriers and a secure infrastructure will be developed to control [patient] access to their own health information through the web or digital television.”<sup>(3)</sup>

When fully implemented, patients will be able to access their own health information, communicate with their physicians, receive new health information, schedule appointments and make their care wishes known from anywhere in the world. At home, they can have monitoring available for things such as blood pressure or heart rhythms, that will alert their providers if there is a problem.

These changes create a major philosophical shift from a society where the doctor knows best and little information was provided to patients and families, to one where patients have enormous empowerment through access to information.

While the changes in information technology are extraordinary, it is the combination of these changes that has the potential to revolutionize the healthcare system.

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<sup>(3)</sup> Connected Health, “Developments in direction and delivery of IM & T for the National Health Service in England”, Sir John Pattison, Director of R&D, and Dr. Peter Drury, Head of Information Policy, Department of Health, England, p. 80-89

## **FINANCE AND REIMBURSEMENT**

Historically, NHS hospitals have been reimbursed on a fixed expense budget to care for a given population. If the number of patients exceeded the budget and therefore costs exceeded budget, savings needed to accrue in the following year to make up the difference. This is similar to the capitated system used by health maintenance organizations in the United States.

The new direction in which NHS is headed is closer to the DRG reimbursement in the US. Hospitals will be paid a national per-case payment adjusted for severity and region. There will also be a pay-for-performance component based on national clinical protocols. Therefore, instead of managing an expense budget, hospitals will have an operating statement with the ability to retain savings.

Incentives for hospitals are totally different under these two scenarios. Instead of incentives to manage a population of patients, the incentive is to attract more patients, similar to the US. Additionally, the government has embarked upon the largest building program in a generation, with 100 new hospitals and 3,500 new primary care centers by 2010. This, combined with new service and quality standards has the potential to have a major financial impact on the total NHS budget. Already national spending on healthcare in England has increased significantly.

## **PATIENT SERVICE STANDARDS**

Historically patients in the NHS have had long waits for appointments and little choice of specialists and hospitals. Patients essentially accessed specialists through their primary care provider, when and where they were told specialists were available.

At the beginning of the new millennium, dissatisfaction with access was becoming a major political issue for the government. The new standards that are being implemented create choice of hospitals and specialists with required standards for access to care. For example, if a patient needs a specialist, he/she will be provided a choice of five specialists (including one from the private system) with the expectation that service will be provided within twelve weeks. Although that may seem a long time by our standards, it is considerably shorter than current availability. Patients will be able to select their hospital. Hospitals are being given standards for service. An example would be that over 90% of the patients in Accident and Emergency need to be seen, treated and released or admitted within four hours. Certain tertiary services, such as transplantation, will

remain regionalized to maintain high volume, high quality, cost-effective care for these patients.

Access has also been addressed through the NHS Direct, the largest provider in the world of direct access healthcare. This is a 24-hour, 7-day-a-week nurse call center covering all of England. The call center receives approximately six million calls per year.

## **QUALITY**

The quality implications of these changes are truly significant. The NHS will have the ability to conduct outcomes research on a national level. National clinical protocols are being developed and made publicly available. Patients will have the ability to assess the care that they receive against these protocols. Physician specific outcomes are being published for diagnosis and standards of care. Hospital specific outcomes are being published for quality metrics such as hospital-acquired infections. Clinical decision support has been developed to train physicians. This could easily be migrated to the public domain for their use as well.

## **IMPLICATIONS AND CHALLENGES FOR THE NHS**

While many benefits will occur from this project, such as increased patient safety and convenience, better quality medicine and greater efficiency, many challenges remain. As Ron Cullen, Director of the NHS Clinical Governance Support Team, described these changes, "This was not an evolution, but a revolution." Given the historic standards and values of the NHS, this is probably true. Over time, the challenge will be continued funding and successful implementation. Already, IDX has been replaced by Cerner in Southwest England because of non-performance. Another software challenge is with family physicians. Over 55% of family physicians use an office-based software called EMIS. As of March, 2005, EMIS had not signed-up for the project, leaving doctors and nurses in these practices upset.

The cost of the clinical transformation and system implementation on a national level is massive. Updating clinical protocols and information systems on a national basis is difficult and costly. Unknown is the change in public expectations once service is improved and quality standards are more widely used by the public. It would seem obvious that the system being created is more

like the US and the cost pressures could potentially mirror those of the US, creating a different level of financial pressure on the entire country.

## **IMPLICATIONS FOR THE US**

With the appointment of Dr. David Brailer by the Bush administration, the pressure and expectation for the US to have a clinically-integrated clinical information system has risen enormously. A number of regional health information initiatives are being undertaken to provide shared clinical information. The great divide comes in funding. Currently, all of healthcare IT for physicians and hospitals is funded by individual organizations. Not unexpectedly, some organizations are ahead in this area and others are struggling with how to fund and manage this change. Dr. Brailer has clearly created the expectation and desire of every hospital and physician practice to have access to electronic health information. Patients, too, are having this expectation.

According to Capgemini, 2005 priorities for action include: enhancing quality and outcomes reporting, accelerating technology implementation, evolving towards an electronic health record, leveraging the web to empower consumers, finding new solutions to old problems through collaboration, consolidating back office functions to reduce overhead, managing capacity, addressing new markets, recognizing the problem of obesity, and managing outsourcing.<sup>(4)</sup> All of these touch on the implementation of good IT solutions with health records that can be used to demonstrate best practices and improved quality of care.

The challenges in accomplishing this goal are enormous. The first and foremost challenge is access to capital. Nationally, there is a surge to build new hospital and outpatient facilities. Seismic issues in California put additional pressure and time requirements on this construction activity. A significant amount of the activity will be funded by hospital bonds. It is well known that in the last few years there have been more downgrades than upgrades in hospital bonds, making the debt increasingly expensive. This is combined with increasingly rapid changes in medical technology, especially in the area of diagnostic imaging. Not only do returns on investment need to be accomplished in shorter timeframes, all new equipment images will need to be interfaced with the clinical information systems. These issues will be compounded with other cost pressures such as

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<sup>(4)</sup> Healthcare's Top Business Issues and Responses for 2005, A Capgemini Forecast

aging demographics, staffing shortages, mandated staffing ratios, serving the uninsured, increasing service standards, new treatments and diagnostic capability, preparedness for bioterrorism and epidemics, and new regulatory pressures such as HIPAA.

Publicly available information on clinical outcomes and patient safety will place additional pressure on physicians and hospitals to create value. This is especially true if the current trend for patients to assume a greater proportion of the cost of their care continues. As payors, employers, and employees pay more for their care, the question will be: has all the increase in cost created a better healthcare system. Clearly, it will be better for some and not for others, as the disparity of access will continue to increase absent a national healthcare policy. Pressure will continue as countries like England pursue an integrated policy in these areas. Surely, public information on availability of outcomes information will create a better way to compare healthcare on an international basis. Ironically, as other countries advance in healthcare and standardize electronic health records, they will be in a better position than the US to measure and improve quality on a national basis.

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## REFERENCES:

- “What Can The UK And US Health Systems Learn From Each Other?” By Lois Quam and Richard Smith, British Medical Journal, April 1, 2005
- Healthcare’s Top Business Issues and Responses for 2005, A Capgemini Forecast
- “The Health Of Nations”, A Survey of Health-care Finance, by Paul Wallace, The Economist, July 17, 2004
- Connected Health, Essays from Health Innovators, Edited by Kevin Dean
- NHS Website: [www.nhs.uk](http://www.nhs.uk)
- Clinical Governance Annual Report 2002/2003, Kings College Hospital Trust
- “Labour Pledges Shorter Wait For Treatment”, by Andrew Grice, the Independent, March 8, 2005
- “Patient Advice and Liaison Service (PALS)”, Kings College Hospital
- AFC News, February, 2005
- “Breaking The Rules: Engaging The Future Patient”, by Gordon Best, Nigel Edwards and Richard Normann, Leading Edge, August, 2004, Modernisation Agency
- “Ensuring Good Design In Healthcare”, Briefing, June, 2004, NHS Confederation
- “IT Overhaul Needs A Tonic”, by Nicholas Timms, Financial Times, March 11, 2005