

The NHS in Recession – Embracing Technology and Structural Reform Alongside Patient Empowerment Is Key

Shreena Suchak (3rd year MBChB) King's College London

Correspondence to: Shreena Suchak: shreena.suchak@kcl.ac.uk

ABSTRACT

The NHS is a symbol of pride for the UK with a fundamental principle to provide comprehensive healthcare that is free at the point of access for all. Sustaining this caring concept is something that we should care about. However, in the current political and social climate real changes are required to allow the NHS to continue serving its fundamental purpose. This article outlines how empowering patients, embracing technology and reviewing current NHS structures may be able to help the NHS move through this difficult period for the UK as a whole.

Key Words: NHS reform; sustainable healthcare; health promotion

Introduction

The NHS was established in 1948 under the Labour government, but the post-war UK setting is starkly different from the modern day society in which the NHS exists. Thus, many aspects of the NHS are unrecognisable from when it was established although its fundamental aim of providing comprehensive healthcare that is free at the point of access for all has remained the same.

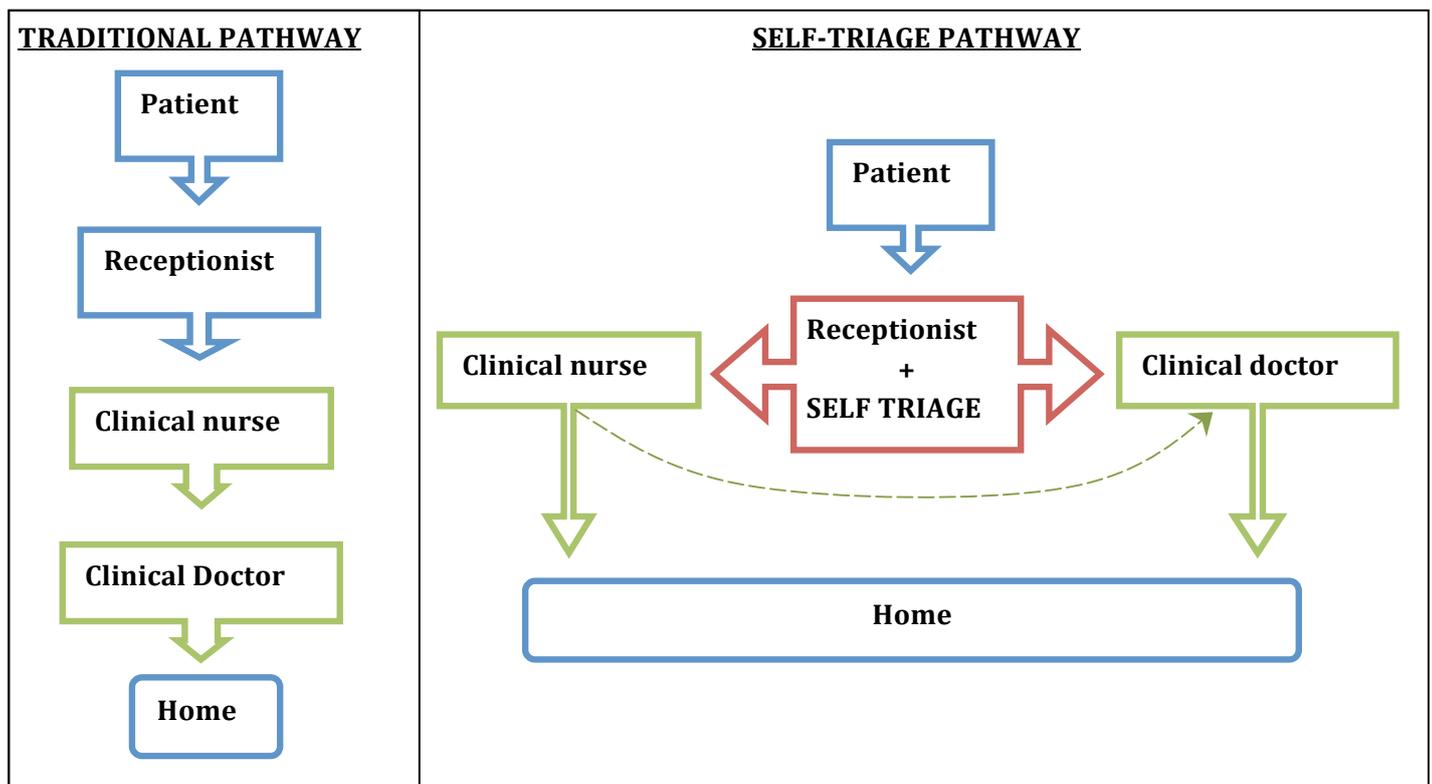
In its current form, the NHS is facing many difficulties due to the growing demand and limited supply of service provisions. The net expenditure on the NHS, as a proportion of Gross Domestic Product, has increased from 3.5% in 1951 to 8.2% in 2011.¹ These expenses are predicted to rise and the growth is not sustainable with limited funding. Alongside this, the “Nicholson Challenge” attempts to salvage £20 billion in efficiency savings by 2015 that is adding pressure to the NHS to perform.² In order to improve accessibility and sustainability of the UK health services, health creation in the form of reorganisation and adaptation of services needs to be considered.

Patient Empowerment

Firstly, individuals care about their own healthcare. Therefore empowering patients to take more responsibility for their health could be a step forward. The NHS constitution states that users make a significant contribution to their own, and their family's, good health and well-being, and should take some personal responsibility for it.³ Self-management is not a foreign idea in the health sector and many other industries have reported savings by implementing

self-services. Healthcare professionals should promote self-management of less acute medical conditions and actively discourage patients from becoming too reliant upon NHS services for conditions such as the common cold. Another approach has been the use of a self-triage system. A study by Hitchings & Bartner in 2009, tested the concept of self triage in two sexual health clinics in London.⁴ As part of registration, a self-assessment form was given to patients in which they stated the reason for their visit. This enabled faster referral to the appropriate services (clinical nurse or doctor), as shown in figure 1 below.

Figure 1: Comparison of patient pathways for the sexual health clinic: traditional vs. self-triage initiative ⁴



This resulted in shorter waiting times and improved efficiency of tailored services.⁴ The concept of a self-triage system could be applied to other health departments, such as Accident and Emergency, that may improve access to services and minimise wastage of resources or inappropriate referrals.

Importantly, for patients to be able to self-manage their conditions, they do need to be able to assess their own medical condition, at least in a simplistic way. Indeed, the internet creates ease of access and a vast number of opportunities for patients to take responsibility for their health. For example, the development of NHS 111 (formally known as NHS Direct) as an online self-assessment tool, allows patients to check their symptoms and receive appropriate medical advice remotely. This system reported dealing with 8 million calls per year with 40% resulting in self-management.⁵ Through the self-assessment pathway, NHS Direct estimated saving the NHS £213 million in 2010 by avoiding inappropriate patient visits

to A&E and GP.⁶ Taking advantage of internet acumen could improve access and sustainability of health services in the UK as costs are reduced at the service interface.

Patient Education

Education for patients is fundamental to ensure sustainability of health services. In some cases, patients will not seek medical services until their condition has transcended a certain threshold. However, this results in higher costs of external failures for NHS, such as more invasive or long-term treatment. Thus, a shift of focus to illness prevention is essential. If there was more public awareness of certain symptoms for disease recognition, such as red-flag signs for bowel cancer, as well as promotion of a healthy lifestyle then future healthcare costs could be reduced.

Currently, there are some national initiatives that aim to improve patient outcomes through education and awareness. For example, the “F.A.S.T” campaign for stroke has been a major success. It simply emphasises that sudden problems with the face, arms and speech should warrant immediate alert of emergency services. A survey by the National Audit Office in 2010 noted that 85% of stroke patients and carers of people who had experienced a stroke were aware of the F.A.S.T campaign.⁷

Another example is the meningitis awareness campaign that was launched in Winter 2012. This focused on educating people on the key symptoms of meningitis to prompt early symptom recognition. The campaign targeted the public by using simple methods to provide information to patients such as, distributing fridge magnets with a symptom checklist (Figure 2).

Figure 2: Meningitis symptoms checklist⁸

MENINGITIS & SEPTICAEMIA
INFLAMMATION OF BRAIN LINING INFECTION OF THE BLOOD

CHECK THE SYMPTOMS
MENINGITIS & SEPTICAEMIA CAN OCCUR AT THE SAME TIME. SYMPTOMS CAN APPEAR IN ANY ORDER AND MAY NOT APPEAR AT ALL.

	Septicaemia	Meningitis
SPECIFIC SYMPTOMS		
Cold hands & feet	<input type="checkbox"/>	<input type="checkbox"/>
Leg pain	<input type="checkbox"/>	<input type="checkbox"/>
Abnormal skin colour	<input type="checkbox"/>	<input type="checkbox"/>
Rash	<input type="checkbox"/>	<input type="checkbox"/>
Stiff neck	<input type="checkbox"/>	<input type="checkbox"/>
Dislike of bright light	<input type="checkbox"/>	<input type="checkbox"/>
Seizure, stiff/jerky movements	<input type="checkbox"/>	<input type="checkbox"/>
Altered mental state/confusion	<input type="checkbox"/>	<input type="checkbox"/>
GENERAL		
Headache	<input type="checkbox"/>	<input type="checkbox"/>
Breathing difficulties	<input type="checkbox"/>	<input type="checkbox"/>
Severe lethargy	<input type="checkbox"/>	<input type="checkbox"/>
Severe joint/muscle pain	<input type="checkbox"/>	<input type="checkbox"/>
Fever, vomiting or diarrhoea	<input type="checkbox"/>	<input type="checkbox"/>

SYMPTOMS in BABIES may also include

- Slippery skin, pale or turning blue
- Poor feeding
- Tense or bulging soft spot (fontanelle) on baby's head
- High pitched cry/irritable (especially when touched)

The TUMBLER Test
People with septicaemia may develop a rash of tiny red 'pin prick' marks which can develop into purple bruising

- Press the side of a clear glass firmly against the rash
- If the rash does NOT fade, seek medical help IMMEDIATELY
- If the rash fades, KEEP CHECKING. In rare cases, the rash can change

On darker skin the rash can be difficult to see. Check for the rash on paler areas such as the palms of the hands.

The rash is often a LATE symptom and may not appear at all. DO NOT WAIT FOR THE RASH. Seek medical help IMMEDIATELY

Meningitis can KILL in under 4 hours

Meningitis UK fund: preventative research to protect future generations
www.meningitisUK.org Tel: 0117 947 6320

The Information Standard Certified member

Rag Charity No: 1076774 (England & Wales)

These educational strategies have improved public awareness of important medical conditions outside of hospital settings. Patient education initiatives are especially important

for conditions where early recognition and timely management is imperative for patient outcomes.

It is also applicable to self-assessment of more long-term conditions, for example, the national 'Be Clear on Cancer' campaigns. These highlight the main symptoms of various cancers through a range of media including posters, television and radio. For example, successful pilot schemes of a campaign focusing on lung cancer in 2011/12 showed an average of 14% increase in early diagnosis due to increased patient education and awareness of potential lung cancer symptoms.⁹ This patient self-assessment campaign has been re-launched this summer to further promote awareness.⁹

If this educational approach is extrapolated into other areas of healthcare, it could considerably minimise long-term costs. As an example, it was estimated that severe hypoglycaemic attacks, which require hospital admission, cost the NHS approximately £30 million per year in 2010/2011.¹⁰ These costs have been predicted to rise but if patients were given more education on the early self-assessment of hypoglycaemic symptoms, such as a checklist, these expenses may be significantly reduced.

Furthermore, healthcare professionals should educate patients on their condition and promote the use of simple tests so that they can acquire the knowledge and skills to enable them to manage their own health. This is especially applicable to long-term conditions. For example, GPs/practice nurses may encourage the use of home monitoring devices for glucose levels and blood pressure. This approach may help to engage patients with their own care but also highlights when blood pressure or glucose control are not optimal. However, healthcare professionals are not the only source of patient education about health. Established in the NHS in 2004, the Expert Patient Programme (EPP) provides free courses to educate patients with long-term conditions and promote self-care. In 2010, EPP saved approximately £1,800 per patient per year by reducing the number of visits to the GP and hospitals.¹¹ These forms of programs are potentially hugely important to the NHS with the UK's ageing demographics and increasing proportion of patients with multi-morbidity. Indeed, the Department of Health estimates that there are 15 million people in the UK suffering from a chronic condition.¹² If the EPP figures are extrapolated to just half of this proportion, £12.6 billion could be saved.

Embracing Technology

Telemedicine has become an increasingly appealing method of health management. A recent study indicated that supervision of physiotherapy exercises for patients with cystic fibrosis could be done efficiently by video-conference rather than attendance at specialist healthcare centres.¹³ This could improve equality of access to healthcare support for patients in remote areas and also reduce the pressure on health service waiting lists. Telehealth is considered to be cost-effective and lowers costs for health providers.

Another opportunity could be for post-operative patients who could communicate their recovery with the medical team from the comfort of their own home. A review of palliative paediatric care reported that administering support and monitoring via telehealth reduced

anxiety levels for patients.¹⁴ With telemedicine, there is less disruption of daily activities for patients since there is no need to physically attend appointments. Correspondingly, there is greater dignity for patients because they have motivation for their own care and recovery can be undertaken in their home rather than a hospital environment.

Other branches of technology can be utilised to create options for healthcare. Already there are a number of medical applications for smartphones that involve tutorials and video demonstrations for patients as well as monitoring capabilities. In 2012, the Health Secretary Andrew Lansley recommended 500 smartphone applications that could be “prescribed” to patients.¹⁵ For example, smartphone tools for dietary regulation can scan the bar codes of food items and report the calorie content. With the number of smartphone users rising at a rapid rate, this method of managing healthcare may improve access and compliance for more patients as they are able to take control of their healthcare. This system is also cost-effective and sustainable since inappropriate hospital visits may be reduced. There are many future possibilities for these electronic systems including health promotion and increased coverage for healthcare screening programmes, such as self-checking for breast cancer.¹⁵

Recently, the Department of Health trialed a Whole System Demonstrator Programme which evaluated the use of telehealth and self-monitoring of patients suffering from diabetes, COPD or heart failure.¹⁶ It reported that using telehealth can reduce mortality rates by 45% and also decrease elective as well as emergency admission each by 15-20%.¹⁶ The success of this trial has led to a concordant “three million lives” campaign to use these technology systems in healthcare to enhance the lives of 3 million people within 5 years.¹⁷

However, it should be noted that there are limitations to these technological approaches. Firstly, barriers to implementation of new systems and set up costs need to be outweighed by the benefits.¹⁸ There has been advances in using home self-monitoring systems, for example home blood pressure monitoring kits for hypertension, which report some success but still need further evaluation to warrant national uptake.¹⁸

Additional challenges include difficulties maintaining patient compliance, ensuring patients are given enough training to use the self-monitoring equipment and encouraging self-care that moves away from the traditional interface. Despite, the younger generations becoming more adept at using apps and other technical devices, some of the older population may still find it difficult to use the new equipment. Therefore, in order for technology strategies to be effective in healthcare, there needs to be focus on patient empowerment and patient-centered implementation.

Structural Change

The nature of healthcare is constantly changing as new conditions emerge and innovative treatments are discovered. However, the static nature of the NHS structure has led to a mismatch with the changing expectations for healthcare. These inefficiencies need to be addressed in order to enable optimal distribution of the limited health resources.

In terms of sustainability, funding is a key concern for the NHS. Opportunities to create more

of a public-private healthcare mix are associated with negative connotations of inequality and inequity but the principles of user-funding could augment healthcare provision. Simply stated, the main aim of the UK healthcare system should be to cater for patient needs and with this central principle, it is essential to move past the impasse surrounding the stigma of privatisation. The recent Health and Social Care Act 2012 was met with raging controversy as it supported increased adoption of a mixed model of public and private healthcare provision.¹⁹ The reforms encourage involvement of private providers and mixed markets, for example Independent Sector Treatment Centres (ISTCs) which provide NHS care but are owned by private organisations.²⁰

Despite concerns over privatisation, the public-private mix is not a new concept in the UK's healthcare structure. Historically, the government introduced the Private Finance Initiatives (PFIs) which utilized the monetary advantage of private companies.²¹ Although showing initial success by relieving the use of public funding, there has been concern over PFIs future effects on the healthcare market, such as inefficiencies and increasing competition. Although moving away from the NHS concept of 'free healthcare', the Health and Social Care Act reforms attempt to establish a sustainable structure for the changing healthcare environment. With a mix of private and public services, income could be generated and then be put back into the healthcare system. For example, co-payments for prescriptions already provide some reimbursement for health services. Payment for certain services may also deter some patients who do not actually need the services and may also reduce the 'did not attend' (DNA) rates. This could lead to sustainable efficiency savings for the NHS.

There are many complexities associated with a mixed public-private health service, including two-tiered systems and a 'hub and spoke' tendency; whereby the public sector dealing with emergencies and complex cases, whereas the private sector 'cherry picks' standard procedures.²² Even with the reforms, the future of the healthcare structure in the UK is still somewhat elusive.¹⁹ Nonetheless, for the NHS to remain accessible and sustainable there needs to be a source of funding and healthcare workers need to be involved in the process of adapting the provision of services since they are at the forefront of the healthcare battle.

Conclusion

Possible strategies to combat the NHS in recession include key steps of empowering patients to take responsibility for their health, incorporating new technological advances to encourage self-management and monitoring away from the interface, and adapting structural reform (Table 1).

Table 1: Summary of NHS Strategies to Develop the NHS in Recession

EMPOWERING PATIENTS	TECHNOLOGY	STRUCTURAL REFORM
Self-assessment Self-management	Telehealth and Telecare	Adapting to the changing healthcare environment
Patient education including symptom recognition and transferring skills from the interface	Internet and smartphone technology, such as apps	Public-private mix

The NHS is facing numerous challenges that are putting pressure on the services provided. Unfortunately there is no single panacea to relieve the increasing burden on the health services in the UK. However, accessibility and sustainability of health services may begin to be achieved by focusing on solving the problems of the process, such as funding and illness prevention, rather than “re-arranging the deckchairs of the Titanic”.²³

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