

National Health Service in England: What can we learn from history?

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ABSTRACT

National Health Service in England is a centralized, publicly financed system which provides cradle-to-grave care for all citizens, free at point of delivery. It has been subjected to many reforms, not all of which have been successful. The experience of the NHS in the area of cost containment is fairly clear. New radical health reforms promise to reduce bureaucracy, improving efficiency and quality of care, providing more choice for patients. The NHS is far from perfect but important and relevant lessons could and should be learnt from it.

KEY WORDS: NHS, History

Background

On 5th July 1948, Sylvia Beckingham was admitted to Park hospital in Manchester (today known as Trafford General Hospital) to be treated for a liver condition. Doubtless this was a big event in her life; but it was an even bigger event in British history. Sylvia, 13, was the first patient to be treated on the NHS.

When it was launched by the then minister of health, Aneurin Bevan, it was based on three core principles: that it meet the needs of everyone, that it be free at the point of delivery and that it be based on clinical need, not ability to pay. Since its launch, the NHS has grown to become the world's largest publicly funded health service. It is also one of the most efficient and most comprehensive.

With the exception of some charges, such as prescriptions, optical services and dental treatments, the NHS in England remains free at the point of use for all UK residents. This currently stands at more than 64 million people in the UK and 54 million people in England alone.

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The NHS in England deals with over 1 million patients every 36 hours. It covers everything, including antenatal screening, treatments for chronic conditions, transplants, emergency treatment and end-of-life care.

Health services before the NHS

Before the establishment of the NHS in 1948, the provision of health care was inextricably bound up with religion and controlling the poor. What is clear that capitalism has never been able to provide health care for working people and they have been forced to rely on charity and philanthropy?

Much of the early care for people who were ill was provided by religious communities where care was provided by monks and nuns attached to monasteries.

Scale

The NHS employs more than 1.5 million people, putting it in the top five of the world's largest work-forces, together with the US Department of Defence, McDonalds, Walmart and the Chinese People's Liberation Army.

Funding

Funding for the NHS comes directly from taxation. When the NHS was launched in 1948, it had a budget of £437 million (roughly 15 billion in today's value). For 2015/16, the overall NHS budget was around £116.4 billion.

Early years 1948-1969

The original structure of the NHS in England had three aspects.

Hospital services: 14 Regional Hospital Boards were created to administer the majority hospital services.

Primary Care: General Practitioners (GPs) were independent contractors. Dentists, opticians and pharmacists also generally provided services as independent contractors.

Community services: Maternity and Child welfare clinics, health visitors, midwives, vaccination and ambulance services were the responsibility of local authorities.

1952 – Charges of one shilling (5 pence) was introduced for prescriptions and a flat rate of

one pound for ordinary dental treatment was also brought in on June 1 1952. Prescription charges are abolished in 1965 and remain free until June 1968, when the charges were reintroduced.

1953 - DNA structure revealed.

On April 25, James D Watson and Francis Crick from Cambridge University described the structure of a chemical called deoxyribonucleic acid in Nature magazine. DNA is the material that makes up genes, which pass hereditary characteristics from parent to child. Knowing the structure of DNA allowed the study of diseases caused by defective genes.

1954 - Smoking and cancer link established

In the 1940s, the British scientist Sir Richard Doll begins research into lung cancer after incidences of the disease rise alarmingly. He studied lung cancer patients in 20 London hospitals and expected to reveal that the cause was fumes from coal fires, car fumes or tarmac. However his findings surprised him and he published his study in the British Medical Journal, warning that smokers were far more likely than non-smokers to die of lung cancer. Doll gave up smoking two-thirds of the way through his study and lived to be 92.

1958- Polio and Diphtheria vaccinations programme introduced

One of the primary aims of the NHS is to promote good health, not simply to treat illness. The introduction of the polio and diphtheria vaccine is a key part of NHS plans. Before this programme, cases of polio could climb as high as 8000 with cases of diphtheria as high as 70,000, leading to 5000 deaths.

THE NHS in the 1960s

1960- First UK kidney transplant

The first UK kidney transplant takes place at Edinburgh Royal Infirmary on October 30, 1960 and involved an identical set of 49-year-old twins. The procedure was a success with both the donor and recipient living for a further six years before dying of an unrelated illness.

1961- The contraceptive pill was made widely available.

The launch of the contraceptive pill played a major role in women's liberation and contributed to the sexual freedom of the so called Swinging Sixties. Initially it was available to married

women, but the law was relaxed in 1967. Between 1962 and 1969, the number of women taking pill rises dramatically approximately 50,000 to 1 million.

1962- First full hip replacement was carried out by Professor John Charnely.

Charnley began to devote his energies to developing full hip replacements from 1958. He asked his patients if they minded giving back the hip post-mortem. Apparently, 99% of them agreed, so his team would regularly collect the replacement hips to check wear and tear, and aid research. He improved his design, with a low friction hip replacement and in November 1962, the modified Charnley hip replacement became a practical reality.

1967- The Abortion act

It made abortion legal up to 28 weeks if carried out by a registered physician and if two other doctors agree that the termination is in the best mental and physical interests of the woman. In 1990, the time limit is lowered to 24 weeks. The act does not extend to Northern Ireland.

The NHS in the 1970s

1968 - Britain's first heart transplant

South Africa-born surgeon Donald Ross carried out Britain's first heart transplant at the National Heart Hospital in Marylebone, on May 3 1968. Ross led a team of 18 doctors and nurses to operate on the unnamed 45 year old in the seven hour procedure. The patient died after 46 days from an associated infection and only six transplants were carried out over the next 10 years for fear of failure.

1972- Computerized tomography (CT) scans revolutionized the way doctors examine the body.

CT scanners produce three-dimensional images from a large series of two-dimensional X-rays.

The first CT scanner was dreamt up in England in 1967 by Godfrey Newbold Hounsfield, becoming a reality in 1972.

He won Nobel Prize for his concept alongside the American Allan McLeod Cormack, who developed the same idea across the Atlantic.

Since then CT scanners have developed enormously, but the principle remains the same.

1978- The world's first baby was born as a result of in vitro fertilisation (IVF)

Louise Brown, the world's first test-tube baby was born on July 25 1978. Her parents Lesley and John Brown failed to conceive because of her mother's blocked fallopian tubes.

Dr Patrick Steptoe, a gynaecologist at Oldham General hospital and Dr Robert Edwards, a physiologist at Cambridge University, developed a new technique to fertilise an egg outside a woman's body before replacing it in the womb. More than a million children worldwide will go on to be conceived in this way.

1979- The first successful bone marrow transplant on a child took place.

Professor Roland Levinsky performed the UK's first successful bone marrow transplant on a child with primary immunodeficiency at Great Ormond Street Hospital for Children.

The NHS in the 1980s

1980s - Magnetic resonance imaging (MRI) scans introduced.

MRI scanners proved more effective than earlier equipment in providing information about soft tissues such as the brain. MRI provides very detailed pictures, so it is particularly useful for finding tumours in the brain. It can also identify conditions such as multiple sclerosis and the extent of damage after a stroke.

1980s - Keyhole surgery

Keyhole is used for the first time in an operation to remove a gall-bladder. The technical name for it is laparoscopic surgery, after the instrument that is used to perform the surgery. The procedure will go on to be one of the most common uses of all kind of surgeries.

1986 - First AIDS health campaign

After a number of high-profile deaths, the AIDS advertising campaign set out to shock, using images of tombstones and icebergs. It was followed early in 1987 by a household leaflet carrying the slogan "Don't die of ignorance".

This campaign was in line with the original NHS intention to improve health and prevent disease, as well as offer treatment.

1987- World's first heart, lung and liver transplant

Professor Sir Roy Calne and Professor John Wallwork carried out the world's first liver, heart and lung transplant at Papworth Hospital in Cambridge. The patient survived for a further 10 years after the procedure. Her healthy heart was donated to another transplant patient.

1988 - Breast screening introduced

Mammogram was started in women over the age of 50 to reduce breast cancer deaths. A mammogram works by taking an X-ray of each breast. These X-rays show changes in tissue that might otherwise be undetectable. This means that any abnormalities show up as early as possible, making treatment more effective.

Together with drug therapies, including tamoxifen and herceptin, screening will help reduce the number of breast cancer deaths by more than 20%, a trend that looks set to continue.

The NHS in the 1990s

1990 - NHS community Care Act

Health authorities will manage their own budgets and buy health care from hospitals and other health organisations. In order to be deemed a provider of such health care, organisations will become NHS trusts - independent organisations with their own managements.

1991 - First 57 NHS trusts established.

New NHS trusts will aim to encourage creativity and innovation and challenge the domination of the hospitals within a health service increasingly focused on services in the community.

1994 - NHS Organ Donor Register was set up

The NHS Organ Donor Register was launched in October 1994, following a long campaign by John and Rosemary Cox from the West Midlands. In 1989 their 24-year-old son Peter died of a brain tumour. He had asked for his organs to be used to help others. The coxes said that there should be a register for people who wish to donate their organs.

1998 - NHS Direct launched

This service will go on to become one of the largest single e-health services in the world handling more than half a million calls each month. It is the start of a growing range of convenient alternatives to traditional GP services including the launch of NHS walk-in centres.

The NHS in the 2000s - The new millennium

2000 - NHS walk-in-centres were introduced. You do not need an appointment or to be registered to visit a walk-in-centre. Most centres are open every day of the year and are situated in convenient locations, giving patients access to services outside regular office hours.

2002 - The four hour target to ensure that no patient spends more than four hours in accident and emergency department from arrival to admission, transfer or discharge is set in the NHS Plan in 2000.

2006 - NHS bowel cancer screening launched

Today, all men and women aged 60-74 are invited to carry out a faecal occult blood test at home. An additional one-off test called bowel scope screening is gradually introduced from March 2015.

2007 - Smoking was banned in restaurants, pubs and other public places in England.

2008 - A national programme to vaccinate girls aged 12-13 against human papilloma virus (HPV) was launched to help prevent cervical cancer. There is also a three year catch-up campaign that will offer the HPV vaccine (also known as the cervical cancer jab) to 13 to 18 year old girls.

The NHS in the 2010s

The NHS is undergoing major changes in its core structure, including who makes decisions about NHS services, service commissioning and the way money is spent. so far, the 2010s have seen great medical breakthroughs and health innovations, the NHS was celebrated at the London 2012 Olympic Games and marked its 65t anniversary on July 5, 2013.

Then and now: Advancement

Life expectancy

In 1948 the life expectancy for men was 66 and for women, 71. Today those figures are 79.1 and 82.8.

Deaths

Over the past 70 years the proportion of all deaths caused by cancer has risen, from 16.9

to 28 percent. Those caused by heart disease have fallen from 35.4 to 26 percent ; but stroke have fallen from 11.5 to 7 percent; by bronchitis and other respiratory diseases have fallen from 10.4 to 0.7 percent ; and from tuberculosis have fallen from 4.7 to 0.7 percent.

Childbirth

When the NHS was born, there were 34.5 perinatal deaths for every 1000 live births. Today they are just 2.8.

Vaccinations

The average child in 1948 would receive just two routine vaccinations, smallpox and diphtheria. By 2008 that list had grown to seven, diphtheria, tetanus, polio, whooping cough, influenza, MMR and meningitis C.

Smoking

In 1948, 65 percent of Britain's male population smoked. By 2016, the number had dropped to just 20 percent. Among women, the figure has fallen from 41 to 17 percent.

Budget on Drugs

In 1948 £31.7 million was allocated to spend on drugs. Today that figure tops £11 billion.

Cost per head

In 1948 the annual cost of the NHS per head, per lifetime was was £200. Now that figure has risen by more than 800 percent to £1700.

Patients

The NHS now sees and treats more patients than ever before. Last year, on an average day, 50,000 people were seen in Accident and Emergency department alone.

Prescriptions

In 1948, prescriptions were free. Today they cost £8.40 per item.

Staff

The NHS was launched with a total hospital staff of 68,013, not including doctors. Now NHS as a whole employs more than 376,370 nurses and thousand more doctors, healthcare

assistants and ancillary staff.

General Practitioners (GPs)

In 1950 there were approximately 21,450 GPs in Britain. By last year that number had grown to 33,360.

What are the main challenges facing the NHS

Some of the key challenges currently facing the NHS are :

- An ageing population
- A growing population
- Evolving healthcare needs, such as the increase in cases of obesity and diabetes, or antibiotic resistance.
- Medical advancements save lots of lives every year, but push up costs considerably. It is estimated that progress in medical technology costs the NHS at least an extra £10 billion a year.
- Closure of local services due to centralisation drives.
- An increase in reliance on privatised services.

Lessons learnt

Almost 68 years after its creation, the NHS's founding principles remains intact: it continues to be funded from general taxation and free at the point of use.

NHS tax funding has meant that health matters are far more sensitive in the UK than in insurance-based countries. Politicians have tried to find solutions to the problems of health care delivery in relentless reorganisations of the service or in the establishment of central targets.

The original NHS was a doctor-dominated service and negotiations between GPs and the government continue to take centre stage, as seen in the recent rise in GP pay and the conflict over surgery opening time.

A system such as the NHS depends on queuing (waiting lists) for access of care, as

well as postponing, or simply not providing, certain services. The NHS devotes considerable resources to high-return services as prenatal and infant care.

To the populations served and to the larger public concerned with equitable provision of care, the universal nature of the service is beneficial. New radical health reforms promise to reduce bureaucracy, improving efficiency and quality of care, providing more choices for patients. The NHS is far from perfect but the UK health care system is not the evil being painted by some opponents of U.S. healthcare reform. Important and relevant lessons could and should be learnt from it.

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