**Healthcare**

**1980s**

**MRI scans introduced**

Using a combination of magnetism and radio frequency waves, MRI scanners provide information about the body.

Magnetic resonance imaging scanners prove more effective in providing information about soft tissues, such as scans of the brain. The patient lies inside a large cylindrical magnet and extremely strong radio waves are then sent through the body. It provides very detailed pictures, so is particularly useful for finding tumours in the brain; it can also identify conditions such as multiple sclerosis and the extent of damage following a stroke.

**1980**

**Keyhole surgery**

A surgeon uses a telescopic rod with fibre optic cable to remove gallbladder.

This first successful instance of keyhole surgery is the removal of a gallbladder. Technically it’s known as laparoscopic surgery, after the instrument that’s used to perform the surgery, a thin telescopic rod lit with a fibre optic cable and connected to a tiny camera which sends images of the area being operated on to a monitor. The procedure will go on to be one of the most common uses of this kind of surgery. It will also be used for hernia repairs and removal of the colon and the kidney.

**1980**

**Black Report**

Commissioned three years earlier by David Ennals the report aimed to investigate the inequalities of healthcare.

Commissioned three years earlier by David Ennals, then secretary of state, the report aims to investigate the inequality of healthcare that still exists despite the foundation of the NHS i.e. differences between the social classes in the usage of medical services, infant mortality rates and life expectancy. Poor people are still more likely to die earlier than rich ones. The Whitehead Report in 1987 and the Acheson report in 1998 reached the same conclusions as the Black Report.

**1981**

**Improved health of babies**

The 1981 Census shows that 11 babies in every 1,000 die before the age of one. In 1900 this figure was 160.

Childhood survival has been revolutionised by vaccination programmes, better sanitation and improved standards of living, resulting in better health of both mother and child. Increased numbers of births in hospital has meant that where unexpected problems do occur, medical help is on hand. Around one baby in eight requires some kind of special care following birth. Twenty years ago, only 20% of babies weighing less than 1,000g (2lbs 2oz) at birth survived. Now that figure is closer to 80%.

**1986**

**Aids health campaign**

The government launches biggest public health campaign in history to educate people about the threat of Aids as a result of HIV.

Following a number of high-profile deaths, the advertising campaign sets out to shock – with images of tombstones and icebergs, followed early in 1987 by a household leaflet, “Don’t die of ignorance”. This was very much in keeping with the NHS’s original concept that it should improve health and prevent disease, rather than just offer treatment.

**1987**

**Heart, lung and liver transplant**

First heart, lung, and liver transplant is carried out at Papworth Hospital.

Professor Sir Roy Calne and Professor John Wallwork carry out the world’s first liver, heart and lung transplant at Papworth Hospital in Cambridge. Professor Calne describes the patient as “plucky” and she survives for a further 10 years after the procedure. Her healthy heart is donated to another transplant patient.

**1988**

**Breast screening is introduced**

Comprehensive national breast-screening programme introduced.

To reduce breast cancer deaths in women over 50 this project is launched with breast-screening units around the country providing mammograms. A mammogram works by taking an X-ray of each breast, which can show changes in tissue that might be otherwise undetectable. This means that any abnormalities show up as early as possible, making treatment more effective. Screening, together with improved drug therapies will help to cut breast cancer deaths by more than 20%, a trend that looks set to continue.

**1990**

**NHS and Community Care Act**

Internal market is introduced, which means health authorities manage their own budgets.

Now health authorities will manage their own budgets and buy healthcare from hospitals and other health organisations. In order to be deemed a "provider" of such healthcare, organisations will become NHS Trusts, that is, independent organisations with their own managements.

**1991**

**First NHS Trusts established**

Fifty-seven NHS trusts are established to make the service more responsive to the user at a local level.

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

**1994**

**NHS Organ Donor Register**

National register for organ donation is set up to co-ordinate supply and demand after a five-year. campaign

The NHS Organ Donor Register is launched following a five-year campaign by John and Rosemary Cox. In 1989 their 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. By 2005 more than 12m had registered. Organ donation is needed as demand outstrips supply and this register ensures that when a person dies they can be identified as someone who has chosen to donate their organs.

**1998**

**NHS Direct launches**

A nurse-led advice service provides people with 24-hour health advice over the phone.

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, which offer patients treatment and advice for a range of injuries and illnesses without the need to make an appointment.

**2000**

**NHS walk-in centres**

New health facilities open offering convenient access, round-the-clock, 365 days a year.

NHS walk-in centres (WiCs) offer convenient access to a range of NHS services and are managed by Primary Care Trusts. There are around 90 NHS WiCs dealing with minor illnesses and injuries. WiCs are predominantly nurse-led first-contact services available to everyone without making an appointment or requiring patients to register. Most centres are open 365 days a year and are situated in convenient locations that give patients access to services even beyond regular office hours.

**2002**

**Primary care trusts launched**

Primary care trusts are set up to improve the administration and delivery of healthcare at a local level.

The primary care trusts oversee 29,000 GPs and 21,000 NHS dentists. primary care trusts that are in charge of vaccination administration and control of epidemics also control 80 per cent of the total NHS budget. They also liaise with the private sector when contracting out of services is required. As local organisations, they are best positioned to understand the needs of their community, so they can make sure that the organisations providing health and social care services are working effectively.

**2004**

**Patient Choice Pilots**

All patients waiting longer than six months for an operation are given a choice of an alternative place of treatment.

Everyone who is referred by their doctor for hospital treatment is given a choice of at least four hospitals. Nowadays you can choose where and when to have your treatment from a list including local hospitals, NHS foundation trust hospitals across the country and a growing number of independent sector treatment centres and hospitals that have been contracted from the private sector. You can choose according to what matters most to you: waiting lists, MRSA rates, bus routes and so on.

**2007**

**Robotic intervention**

Introduction of robotic arm leads to groundbreaking operations to treat patients for fast or irregular heartbeats.

This technological revolution is being used at St Mary’s Hospital, London, and is less risky than more invasive techniques. It works by inserting several fine wires into a vein in the groin, which are then guided to the heart where they deliver an electric current to parts of the heart muscle. Cardiologists control the robot arm via a computer and joystick, but in future the system could be automated. Around 50,000 people develop an irregular heartbeat each year, and it is a major cause of strokes and heart attacks.

**2008**

**Free choice is introduced**

Free choice is introduced on April 1 2008. Patients can choose from any hospital or clinic that meets NHS standards.

Patients who are referred by their GP for their first consultant-led outpatient appointment can choose from any hospital or clinic that meets NHS standards. You can choose a hospital according to what matters most to you, whether it's location, waiting times, reputation, clinical performance, visiting policies, parking facilities or patients' comments.

**2008**

**The NHS at 60**

On July 5 2008, the NHS celebrates its 60th birthday with events across the county.

The NHS was born out of a long-held ideal that good healthcare should be available to all, regardless of wealth. Since its launch in 1948, the NHS has grown to become the world's largest publicly funded health service. On July 5 2008, the NHS celebrates its 60th birthday. Local events take place across the country, and NHS staff and patients celebrate at Westminster Abbey and 10 Downing Street.

**2008**

**HPV vaccination programme**

Cervical cancer vaccination is introduced for teenage girls.

In September 2008, a national programme to vaccinate girls aged 12 and 13 against the human papilloma virus (HPV) is launched to help prevent cervical cancer. A three-year catch-up campaign is also introduced, which will offer the HPV vaccine, also known as the cervical cancer jab, to girls who are 13 to 18 years old.

**2009**

**New NHS Constitution**

The NHS Constitution is published on January 21 and sets out your rights as an NHS patient.

The NHS Constitution is published on January 21 2009. For the first time in the history of the NHS, the Constitution brings together details of what staff, patients and the public can expect from the NHS. It aims to ensure the NHS will always do what it was set up to do in 1948: provide high-quality healthcare that's free and for everyone.

**2009**

**New Horizons programme launched**

The New Horizons programme is launched to improve adult mental health services in England.

New Horizons brings together local and national organisations and individuals to work towards a society that values mental wellbeing as much as physical health.[br][br]It aims to cover a person's lifetime, from building the foundations of good mental health in childhood to maintaining resilience in older age.[br][br]It also emphasises the importance of prevention, effective treatment and recovery.

**2009**

**NHS Health Checks**

The NHS Health Check is introduced for adults in England between the ages of 40 and 74.

Primary care trusts begin implementing the NHS Health Check programme in April 2009. It has the potential to prevent an average of 1,600 heart attacks and strokes and save up to 650 lives each year. It could prevent over 4,000 people a year from developing diabetes and detect at least 20,000 cases of diabetes or kidney disease earlier, allowing people to manage their condition better and improving their quality of life.

* 1980 – First [vaccine for Hepatitis B](http://en.wikipedia.org/wiki/Hepatitis_B_vaccine) - Dr [Baruch Samuel Blumberg](http://en.wikipedia.org/wiki/Baruch_Samuel_Blumberg)
* 1981 - [Artificial Skin](http://en.wikipedia.org/wiki/Artificial_Skin) - [John F. Burke](http://en.wikipedia.org/wiki/John_F._Burke) & [Ioannis V Yannas](http://en.wikipedia.org/w/index.php?title=Ioannis_V_Yannas&action=edit&redlink=1)
* 1981 - [Bruce Reitz](http://en.wikipedia.org/wiki/Bruce_Reitz) performs the first human heart-lung combined transplant
* 1982 - [Humulin insulin](http://en.wikipedia.org/w/index.php?title=Humulin_insulin&action=edit&redlink=1) - Eli Lilly
* [Interferon Cloning](http://en.wikipedia.org/w/index.php?title=Interferon_Cloning&action=edit&redlink=1) - [Sidney Pestka](http://en.wikipedia.org/wiki/Sidney_Pestka)
* 1985 - Automated [DNA Sequencer](http://en.wikipedia.org/w/index.php?title=DNA_Sequencer&action=edit&redlink=1) - Leroy Hood & Lloyd Smith
* 1985 - [Polymerase Chain Reaction](http://en.wikipedia.org/wiki/Polymerase_Chain_Reaction) (PCR) - Kaery Mullis
* 1985 - [Surgical Robot](http://en.wikipedia.org/wiki/Surgical_Robot) - Dr Yik San Kwoh
* 1985 - [DNA Fingerprinting](http://en.wikipedia.org/wiki/DNA_Fingerprinting) - Alec Jeffreys
* 1985 - [Capsule Endoscopy](http://en.wikipedia.org/wiki/Capsule_Endoscopy) - Tarun Mullick
* 1986 - Fluoxetine HCl - Eli Lilly and Co
* 1987 – [Ben Carson](http://en.wikipedia.org/wiki/Ben_Carson), leading a 70-member medical team in Germany, was the first to separate occipital [craniopagus twins](http://en.wikipedia.org/wiki/Craniopagus_twins).
* 1987 - commercially available [Statins](http://en.wikipedia.org/wiki/Statin) - Merck & Co.
* 1987 - [Tissue Engineering](http://en.wikipedia.org/wiki/Tissue_Engineering) - Joseph Vacanti & Robert Langer
* 1988 - [Intravascular Stent](http://en.wikipedia.org/w/index.php?title=Intravascular_Stent&action=edit&redlink=1) - Julio Palmaz
* 1988 - [Laser Cataract Surgery](http://en.wikipedia.org/wiki/Laser_Cataract_Surgery) - Dr Patricia Bath
* 1989 - [Pre-implantation Genetic Diagnosis](http://en.wikipedia.org/wiki/Pre-implantation_Genetic_Diagnosis) (PGD) - Alan Handyside
* 1989 - [DNA Microarray](http://en.wikipedia.org/wiki/DNA_Microarray) - Stephen Fodor
* 1990 - [Gamow Bag](http://en.wikipedia.org/wiki/Gamow_Bag) ® - Dr Igor Gamow
* 1992 – First [vaccine for Hepatitis A](http://en.wikipedia.org/wiki/Hepatitis_A_vaccine) available[[88]](http://en.wikipedia.org/wiki/Timeline_of_medicine_and_medical_technology#cite_note-88)
* 1992 - [Electroactive Polymer](http://en.wikipedia.org/w/index.php?title=Electroactive_Polymer&action=edit&redlink=1) (Artificial Muscle) - SRI International
* 1992 - [Intracytoplasmic Sperm Injection](http://en.wikipedia.org/wiki/Intracytoplasmic_Sperm_Injection) (ICSI) - Andre van Steirteghem
* 1996 - Dolly the Sheep cloned
* 1998 - [Stem Cell Therapy](http://en.wikipedia.org/wiki/Stem_Cell_Therapy) - James Thomson
* 26 June 2000 - Human Genome draft completed
* 2001 [Telesurgery](http://en.wikipedia.org/wiki/Telesurgery) - Jacques Marescaux
* 2001 [Artificial liver](http://en.wikipedia.org/wiki/Artificial_liver) - Kenneth Matsumura
* 2003 – [Carlo Urbani](http://en.wikipedia.org/wiki/Carlo_Urbani), of [Doctors without Borders](http://en.wikipedia.org/wiki/Doctors_without_Borders) alerted the [World Health Organization](http://en.wikipedia.org/wiki/World_Health_Organization) to the threat of the [SARS](http://en.wikipedia.org/wiki/SARS) virus, triggering the most effective response to an epidemic in history. Urbani succumbs to the disease himself in less than a month.
* 2005 – Jean-Michel Dubernard performs the first partial [face transplant](http://en.wikipedia.org/wiki/Face_transplant)
* 2006 – First [HPV vaccine](http://en.wikipedia.org/wiki/HPV_vaccine) approved
* 2006 – Second [rotavirus vaccine](http://en.wikipedia.org/wiki/Rotavirus_vaccine) approved (first was withdrawn)
* 2007 - [Visual prosthetic](http://en.wikipedia.org/wiki/Visual_prosthetic) (bionic eye) Argus II
* 2008 – Laurent Lantieri performs the first full [face transplant](http://en.wikipedia.org/wiki/Face_transplant)
* 2013 - First [kidney](http://en.wikipedia.org/wiki/Kidney) grown *in vitro* in the [U.S.](http://en.wikipedia.org/wiki/U.S.)
* 2013 - First [human liver](http://en.wikipedia.org/wiki/Human_liver) grown from stem cells in [Japan](http://en.wikipedia.org/wiki/Japan)

Engineering