Middle Ages (Medieval Times)

Aspect/ Theme	Beliefs that caused illness	Treatments	Surgery	Public Health measures
War	Islamic doctors like **Rhazes** taught doctors to observe and improve on the work of teachers such as Galen. Belief from Islamic world that disease caused by unfortunate illness	Crusades spread the ideas of Islamic doctors. Islamic philosopher and doctor, **Avicenna wrote "Canon of Medicine**" becomes an important text for medical students till 1700s Learnt Islamic hospitals treated patients & trained doctors. Treat with compassion	Improved skill in sealing wounds – cauterisation, led to quicker amputation. Led to new tools including **arrow cup** – remove arrow head without causing further damage. Improved ointment (**John Arderne's** painkiller)	<u>Influence of Religion</u>: Best sanitation in hospitals. Monks well read & were more informed about public health. Believed fresh water supply a priority when designing monasteries. Link between germs and illness unknown so limited efforts. Kitchens kept separate from toilets = limited contamination. Set example e.g bathed. Black Death – believed punishment from God so promoted prayer and pilgrimage so spread.
Religion	Strong belief God sent illness as a punishment for sinful behaviour (supernatural) Church leaders prevents individuals investigating e.g Roger Bacon imprisoned for promoting experimentation. Church controlled the universities where doctors trained. Teaching based on Galen and Hippocrates	Church promoted Four Humours theory and Galen's theory of opposites as it supported idea God created humans. As a result prayer popular treatment, bleeding to balance humours, monks bled 8 times a year and Church banned people questioning Galen's work. During Black Death = prayer, flagellation	Church controlled universities where doctors trained. Teaching based on ancient texts of Hippocrates and Galen. Surgeons learnt about human anatomy based on Galen who dissected animals. No allowed to question. Church banned medical research and dissection. **De Chauliac** supported Galen, but De Chauliac criticised Hugh of Lucca	
Chance				
Communi-cation			Crusades surgeons shared manuals & diagrams such as the "wound man".	
Govern-ment	Belief that dirty streets in towns created miasmas ordered to clean up			<u>Government</u>: some regulation in response to epidemics such as Black Death e.g Coventry est waste disposal sites. But belief at local and national not their job to ensure good hygiene of others. Regs not effective as cause unknown
Science and technology	**No scientific understanding** of what caused disease. Supernatural reasons given relied on zodiac charts	**Hippocrates**' Treatments based on 4 Humours, e.g blood letting, urine, pulse Natural herbal remedies		
Individuals	Galen dominated medical texts and training. Believed the design theory.	**Galen** believed in **4 Humours and theory of Opposites** -	**Abulcasis** – cauterisation. **Arderne** opium and henbane pain relief. **Hugh of Lucca** – wine stop infection	

Renaissance period (c1450 - 1750)

Aspect/Theme	Beliefs that caused illness	Treatments	Surgery	Public Health measures
War		Battles gave surgeons many bodies to work on	Pare introduced **ligatures** instead of cauterisation and created a herbal treatment for raw wounds. Higher success rate but still no knowledge of cause of disease. **John Hunter** encouraged careful observation and use of scientific methods improved treatment of gun shot wounds	
Religion	Reformation leads to reduced influence on medicine allowing research, observation and dissection. Surgeons encouraged to learn by dissection and thorough scientific research. Treatments – still some belief in supernatural and natural causes. Most still treated by female member of family or local wise woman using herbal and traditional methods. Still lacked scientific knowledge. Church no longer influenced treatment in hospitals. Now focus on treatment as well as care.			Plague still believed God was punishing and prayer needed
Chance			Pare ran out of hot oil and used a new herbal treatment of egg yolk and rose oil for raw wounds to seal wounds stopped death from shock	<u>Government influence</u>: During Great plague 1665 Towns hired plague doctors who wore special clothing to stop catching disease. Scientific approach – observed that death rates higher in poorer, dirtier places. Watchmen hired to prevent people leaving or entering infected houses to stop spread. Quarantine laws prevented epidemic spreading from ships. People ordered to clean streets and remove cats and dogs. Plays banned.
Communication	Increased wealth meant improved literacy rates so more people accessing new scientific ideas published by the new printing press	Improved travel brought new herbs to Britain e.g chinchona from South America. Quacks travelled around making profits from false treatments		
Government			Establishment of Royal Colleges improved training and status of surgeons and doctors	
Science and technology			**Printing press** allowed surgeons to share ideas accurately and quickly **Invention of microscope** helped scientists to make and explain discoveries	
Role of individuals	**Thomas Sydenham** – "English Hippocrates" believed in "scientific method" of treating patients. Believed diseases had different characteristics and encouraged unique treatment and monitoring and building up a body of knowledge. Developed use of Chinchona to treat malaria. **Vesalius** – dissection of humans – his book "On the fabric of the human body" informed illustrations challenged Galen. **Pare** – new herbal treatment to seal raw wounds and ligatures – limited impact only rich could afford to pay for medical care **Harvey** – discovered veins had valves and blood was pumped around body by heart. Questioned Galen especially liver did not produce blood so questioned popular treatment of bleeding. Rejected by conservatives and until could see capillaries under microscope.			

The Industrial period (c1800 - 1900)				
Aspect/Theme	**Beliefs causes illness**	**Treatments**	**Surgery**	**Public Health measures**
War		**Florence Nightingale and Mary Seacole** in Crimean war cleaned up hospitals. Nightingale's "Notes on Nursing" set a standard and argued the need to keep hospitals clean, well ventilated		Government influence: During Cholera epidemic 1848 forced Gov to act - **1848 Public Health Act** – allowed local councils to improve conditions ***if*** wished & prepared to pay. Could force towns to take action over water supply, sewage and appoint medical officer. 1858 London sewers built **1875 Housing Act and Public Health Act** – real breakthrough. Better housing & sewers. Local councils ***forced*** to provide clean water, appoint Medical officers and Sanitary inspectors. LAISSEZ-FAIRE changing
Religion				
Communication	Advertising used medical terms to make people worry and buy mass produced pills			
Chance	Jenner test theory milk maids don't catch small pox and injects James Phipps with cow pox 1797.			
Government	1802 Gave Jenner £10,000 to open vaccination clinic in London. 1840 made vaccination free for all infants. 1853 made vaccination compulsory. But Anti Compulsory Vaccination league 1866 meant by 1887 Gov gave parents right to decide if child vaccinated			Individuals influence: **John Snow** – 1849 published book arguing cholera spread by dirty water rather than air. 1854 carefully mapped location of death and worked out pump in Broad Street, London. Later discovered near a leaky cesspit – careful scientific investigation long before Pasteur's Germ theory. **William Farr** – driving force behind compulsory registration of births, deaths e.g power of numbers **Southwood Smith** – 1824 studied diseases caused by poverty published findings which used by Chadwick **Edwin Chadwick** – est link between poor living conditions, disease and life expectancy. "Clean Party" put pressure on Government to improve conditions in Towns. **Dr Barnado** – ragged school to improve opportunities and holiday fund. Aim to give a better life.
Science and technology	**Stethoscope** 1816 enabled doctors to hear internal workings of body and assess patient's health. **Thermometers** gave doctors accurate records of patient's temperature	**Inoculation** involved giving a low dose of smallpox to make a person immune to the disease. Inoculation became popular in 1721 when introduced by Lady Montagu Mass production of tablets e.g aspirin but no regulation.	Invention of steam steriliser **1895 X-ray machine** allowed surgeons to see bones and assess patients' illnesses more accurately	
Role of individuals	**Jenner** introduced first vaccination against smallpox. Injected Phipps with pus of cowpox giving Phipps immunity to smallpox – VACCINATION but limited success unable to explain. 1861 **Pasteur's Germ Theory** – major breakthrough in microbiology. Developed vaccines for chicken cholera and rabies. Inspired Joseph Lister **Robert Koch** – found way to stain bacteria making them easier to identify under a microscope – could link specific germ to a specific disease. E.g cause of major killers like diphtheria and typhoid **Paul Erlich** 1910 created Salvarsan 606 – chemical killed germs causing syphilis.		**Simpson** 1847 1st to use chloroform as an effective anaesthetic. **Lister** produced first antiseptic – carbolic acid,1871 carbolic spray 1886 **Neuber** developed aseptic surgery. Set standards all to follow e.g scrubbing of hands **Moyniham** – 1890s first in Britain to wear surgical gloves and sterile white garments for surgery	

The Modern period (1900 – c2018)				
Aspect/Theme	Beliefs that caused illness	Treatments	Surgery	Public Health measures
War	**WW I Harold Gillies** developed new techniques for **treating facial injuries**. **Thomas Splint and Casualty Clearing stations** so quicker diagnosis and treatment. Talking therapies to treat shock. **Mobile X rays** and **blood transfusions** saves lives – leads to 1921 British Red Cross first blood banks **WW II** US and British government funded production of **penicillin**. 1944 available to treat all wounded Allied soldiers on D-Day. Today – common form of treatment saving lives but some germs resistant to antibiotics **WW II** - **cataract surgery** developed by Sir Harold Ridley. Sir Archibald **McIndoe improved treatment of brain injuries. Mepacrine an anti malaria** drug developed, Gas masks and **MASH hospitals** with experienced surgeons near to the battlefield. **Emergency control of hospitals** during the Blitz gave central government the right to control hospitals. Now had to work together, share staff and resources. Lay foundations of NHS			1899 Boer War volunteers found unfit to fight due to bad diet and illness WWI PM Lloyd George wanted better housing proposed "Homes fit for Heroes" project.
Religion				
Chance		Fleming discovered the properties of penicillin by change		
Communication		Florey and Chain read Flemings published reports and continued his research.		
Government		**WW II** US and British government funded production of **penicillin**		
Science and technology	Pharmaceutical Industry developed quickly after 1945, become important and wealthy. Range of life saving drugs developed by private companies. All in competition to find cure for cancers and flu. Better regulation of drug companies by NICE has ensured drugs fully tested following mistakes of thalidomide. **Discovery of DNA 1953 and human genome project** enhanced understanding of the body and how it works and how to make it better if malfunctioning		Imaging technology such as **MRI scans** allow surgeons to see inside body. 1961 first heart pacemaker **Keyhole surgery** and laser techniques making operations quicker and reducing healing times. Non invasive surgery using radiation or miniature cameras	
Role of individuals	**1928 Fleming** rediscovered properties of penicillin. Published **1937 Florey & Chain** research penicillin. 1941 test on humans a success			

The Modern period (1900 – c2018)	
Aspect/Theme	Public Health measures
Government	**Liberal reforms 1906 -1914** = No longer Laissez faire 1906 Education (Provision of meals) Act = free school meals 1907 Education Act = created school medical inspections 1909 Housing and Town Planning Act = made it illegal to build back to back houses 1911 **National Insurance Act** = sick and unemployment pay introduced if you paid contributions 1942 **The Beveridge Report** , led to the creation of the Welfare State, with the intention that no one would ever again have to live in poverty. Decided 5 main problems with British society that stopped people making a better life for themselves – 5 Giants e.g Want, Disease, Ignorance, Squalor and Idleness. Recommended the development of the Welfare State available to all **1948 Aneurin Bevan set up NHS as part of the Welfare State**. People had fee healthcare during the war and wanted it to continue. In the first year the service was very popular and great improvements were made in public health. New hospitals followed as part of the plans and the rate of many killer diseases like TB and Polio began to fall for the first time Not all convinced - BMA reported that only 10% of doctors supported the creation of the NHS. Some wanted to keep the right to keep charging patients for treating them privately. NHS and Welfare reforms transformed the health of ordinary people. Pressures on government to review spending – led to shortages and even removal of some drugs and treatments Also government focused on: • prevention through education about healthy eating e.g five a day, • Compulsory vaccination against diseases such as polio • Screening for common cancers e.g breast and cervical cancer. 1952 in response to bad air pollution Gov introduce **2 Clean Air Acts in 1956 and 1968** encouraged people to use gas and electricity rather than coal During 1960s government ordered **slums to be cleared**. Councils built modern homes with central heating and bathrooms. These were often in tower blocks Government established new towns, such as Milton Keynes to help solve problem of overcrowding in major cities
Individuals	1889 **Charles Booth** found that 35% of Londoners lived in poverty 1901 **Seebohm Rowntree** discovered over half of York's working class people lived in poverty 1913 **Maud Pember's "Round about a Pound a week**" highlighted how hard it was to survive on the average labourer's wage. All of the above established the belief that poverty not the fault of people and further strengthened the link between poverty and poor health