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| **Paper 1**  **Medicine in Britain: c1250-presemt.**  [Image result for cartoon image of cross](https://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwju9bCM2onaAhVCCewKHUAvAAsQjRx6BAgAEAU&url=https://www.dreamstime.com/stock-photography-cartoon-wood-cross-image38066032&psig=AOvVaw2aqpL6XEk-fNAH-6zES4dr&ust=1522143909481508)**Medieval England**  **1250-1500** | | **Causes of illnesses** | | **Prevention and Treatment** | | **Individuals** |
| **Religious:** Belief that God caused illnesses.  **Supernatural:** Astrology also used to help diagnose illnesses.  [Image result for four humours for children](https://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwju-7T93YnaAhUFC-wKHSwLAAcQjRx6BAgAEAU&url=https://en.wikipedia.org/wiki/Humorism&psig=AOvVaw3OWP6ej_w2L0p-5_vesTkT&ust=1522144951011547)  **Rational:** Four Humours Theory: Body made of four liquids (blood, phlegm, black and yellow bile). Imbalance of these humours can cause illness and disease. **Hippocrates**  **Miasma:** Belief that bad air was harmful and cause illnesses. | | [Image result for cartoon of praying](https://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwj3p_Ou6YnaAhWGjqQKHUpSAagQjRx6BAgAEAU&url=https://www.aliexpress.com/item/9-14CM-PRAYING-MAN-Cartoon-Character-Decorative-Car-Stickers-Decals-Black-White-C2-0112/32623927388.html&psig=AOvVaw3pJIVpVS4in121Lm0qVx9P&ust=1522148009548621)**Supernatural treatments:** Praying, fasting + Pilgrimages.  **Rational treatments:** Bloodletting, leeches + purging.  Herbal remedies also used to treat the sick. Medieval people also encouraged to take care of their bodies – exercise, sleeping and keeping clean.  **Physician:** Diagnosed illnesses and suggested treatments. Studied patients’ blood and urine.  **Apothecary:** Mixed herbal remedies.  **Barber Surgeon:** Performed simple surgery.  **Hospitals:** Owned and run by the Church.  **Home:** Majority of sick cared for at home (women). | | **Hippocrates:** Four Humours Theory.  + = Observed patients/recorded symptoms + Hippocratic Oath.  - = Ideas on causes of disease were wrong.  **Galen:** Theory of Opposites.  [Image result for cartoon of a pig](https://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwjvsNbZ6YnaAhWS16QKHRDSB4kQjRx6BAgAEAU&url=https://www.dreamstime.com/stock-photography-cute-pig-cartoon-illustration-image34605562&psig=AOvVaw1_miO9avEgF0dom7RocoUW&ust=1522148094904135)+ = Wrote over 250 books on medicine.  - = Made mistakes – Jaw bone made of 1 bone not 2. |
| **Case Study: Black Death (1348)** |
| **Causes:** Sent by God as punishment, bad air that corrupted the body’s four humours.  **Treatment:** Prayer, charms, bleeding and purging, sniffing strong herbs, and fires lit to remove bad air.  **Prevention:** Pray to God, Flagellants + streets cleaned. |
| **Key Words** | | **Key Words** | | **Key Words** |
| **Diagnosis:** Identify illness based on symptoms.  **Miasma:** Bad air that believed to cause diseases.  **Physician:** Qualified person to practice medicine.  **Rational:** Idea based on logic.  **Supernatural:** Ideas not explained by science/nature. | | **Bloodletting:** Drawing blood from the sick.  **Herbal Remedy:** Medicine made from plants/herbs.  **Pilgrimage:** Journey to sacred place.  **Purging:** Removing humours from the body.  **Purifying the air:** Removing foul smells from the air.  **Regimen sanitatis:** Instructions to help treat the sick. | | **Bubonic Plague:** Disease spread by bacteria (sneezing).  [Image result for cartoon of a rat](http://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwje78uS44naAhXD16QKHSeoBqYQjRx6BAgAEAU&url=http://big5kayakchallenge.com/cartoon-drawings-of-rats/nice-cartoon-drawings-of-rats-stock-images-similar-to-id-quirky-cartoon-of-a/&psig=AOvVaw3mat5rO1ykTcfcKdGmDoHq&ust=1522146340206094)**Flagellants:** People who whipped themselves to ask for God’s forgiveness to avoid plague.  **Quarantine**: Separating sick to stop spread of disease. |
| **Renaissance England**  **1500-1700**  [Image result for cartoon of the printing press](http://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwjBy965joraAhUP3aQKHSpJCR0QjRx6BAgAEAU&url=http://smvdiscoverymuseum.org/event-view/science-saturday-11-a-m-and-230-p-m/&psig=AOvVaw3VK4-GLYl531GuEU6jxNPx&ust=1522157967921738) | | **Causes of illnesses** | | **Prevention and Treatment** | | **Individuals** |
| **Continuities:** Miasma Theory, influence of Church during epidemics and that supernatural beliefs.  **Changes:** Most accepted that illnesses were not sent by God, decline of importance regarding the Four Humours Theory and analysis of urine.  There was a move away from old ideas about the causes of illness but they had not been replaced! | | [Related image](https://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwi7v-2U6YnaAhVO3qQKHfOCCg0QjRx6BAgAEAU&url=https://www.123rf.com/photo_29067558_stock-vector-cartoon-herbal-remedy.html&psig=AOvVaw36SQsFLiQYY5ldn4gNWqU9&ust=1522147857466070)**Continuities:** Bloodletting, herbal remedies, removal of bad air, use of apothecaries + surgeons for the poor and role of women caring for the sick who could not go to hospitals.  **Changes:** People looked for chemical cures for diseases, Renaissance hospitals began to treat people with wounds and infectious diseases and Pest Houses. | | **Thomas Sydenham:** ‘*English Hippocrates’*.  + = Placed importance on observing a patient.  - = Doctors/physicians still reliant on Galen’s work.  **Vesalius:** *‘On the Fabric of the Human Body’.* .  + = Corrected 300 mistakes by Galen on anatomy.  - = Caused controversy by challenging Galen’s work.  **William Harvey:** Circulation of the blood.  + = Proved that arteries and vein were linked together.  - = Considered to be mad as challenged Galen’s work. |
| **Key Words** | | **Key Words** | | **Case Study: Great Plague (1665)** |
| [Image result for cartoon of science experiments](http://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwiVsu-T6onaAhXR6aQKHc64BIsQjRx6BAgAEAU&url=http://takingtimeformommy.com/cool-science-experiments-the-way-to-get-your-kids-excited-about-science/&psig=AOvVaw3FMZNF0JOahN9pvp6qGGHj&ust=1522148224783186)**Epidemic:** Disease that spreads quickly.  **Printing Press:** Machine for printing text/pictures.  **Renaissance:** Revival of ideas from 1500-1700.  **Royal Society:** Set up in 1660 to discuss new ideas in medicine and science. Sponsored scientists. | | [Image result for cartoon of a pomander](https://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwjo3rfn5YnaAhXJMewKHU6iDlMQjRx6BAgAEAU&url=https://www.shutterstock.com/search/pomander&psig=AOvVaw08M2giOf2LIsBSe_ThPGAZ&ust=1522147057919643)**Pomander:** Ball containing perfumed substances.  **Transference:** Belief that an illness can be transferred to something else.  **Pest House:** Hospitals that specialised in one disease. | | **Causes:** Unusual alignment of the plants, sent by God as punishment, imbalance of Four Humours + Miasma.  **Treatment:** Prayer, quarantine, fasting, smoking tobacco to ward off miasma + Plague Doctors.  **Prevention:** Local governments tried the following: banning public meetings, closing theatres, sweeping the streets, burring barrels of tar and sweet smelling herbs to ward off miasma, killing cats and dogs. |
| **Industrial Britain**  **1700-1900**  [Image result for cartoon of a factory](https://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwiCmOHmjoraAhXC2qQKHV3kAIgQjRx6BAgAEAU&url=https://www.123rf.com/photo_11431515_smoke-billows-from-the-smokestacks-of-a-cartoon-factory-.html&psig=AOvVaw2zhQO9UscA30A55Ryzudir&ust=1522158026398441) | | **Causes of illnesses** | | **Prevention and Treatment** | | **Individuals** |
| **Continuities:** Miasma Theory, influence of Church during epidemics and that supernatural beliefs.  [Image result for cartoon of germ theory](https://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwjO8qrV-YnaAhWyMewKHW7KAz8QjRx6BAgAEAU&url=https://www.kisspng.com/png-bacteria-cartoon-germ-theory-of-disease-clip-art-p-375818/preview.html&psig=AOvVaw3gsONPV8z6OgahrpIEDYXb&ust=1522152377703111)  **Changes:** Germ Theory (1861) disprovedSpontaneous Generation Theory and believed that germs cause disease in human body. **Pasteur/Koch.** | | **Hospital Care:** c18 Hospitals were dirty, overcrowded and in poor conditions. **Nightingale.**  **Surgery:** c18 surgery was dangerous, problem of pain, infection and bleeding. **Simpson/Lister.**  **Vaccinations:** c18 Smallpox massive killer. **Jenner**.  **Cholera:** Epidemics in 1831, 1848-9 and 1854. **Snow.**  **Public Health Act - 1848:** Not compulsory + no change.  **Great Stink-1858:** Introductions of sewers. **Bazalgette.**  **Public Health Act: 1875:** Compullsory and forced authorities to provide clean drinking water, build public toilets and dispose of sewage to avoid pollution. | | **Louis Pasteur:** Germ Theory (1861).  + = Identified that germs cause disease and illnesses.  - = Unable to identify specific germs.  **Robert Koch:** Microbes (1867).  + = Discovered microbes cause specific illnesses.  - = Took time for his work to be widely accepted.  **Florence Nightingale:** *‘Notes on Nursing’ (1859)*.  + = Improved conditions in hospitals.  - = Had to fight hard in order to change attitudes.  **James Simpson:** Chloroform as an anaesthetic (1847).  + = Provided safer alternative to Laughing Gas + Ether.  - = Difficultly in gauging correct dose to be used.  **Robert Lister:** Carbolic Acid as an antiseptic (1865).  + = Antiseptic surgery – killing germs from wounds.  - = Opposed because of poor knowledge Germ Theory.  **Edward Jenner:** Vaccination.  + = Discovered vaccination for Smallpox (1796).  - = Vaccination not compulsory until 1852 by state.  **John Snow:** Discovered cause of Cholera (1848).  + = Concluded it caused by dirty drinking water.  - = Government unwilling to pay for improvements.  **Joseph Bazalgette:** Introduced Sewer system (1865).  + = Built over 1300 sewers in London.  - = Size of project took time until completed in 1875. |
| **Key Words** | | **Key Words** | |
| [Image result for cartoon picture of a microscope](https://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwjs6sie9YnaAhVG_qQKHWbrD7cQjRx6BAgAEAU&url=https://www.pinterest.com/pin/425097652306860984/&psig=AOvVaw2i9aL8b0I8xoaVZAG_LH_3&ust=1522151197541008)**Englightenment:** Focus on change than continuity.  **Germ Theory:** Theory that Germs cause disease.  **Microbes:** Living organism that can only be seen under a microscope.  **Spontaneous Generation Theory:** Belief that microbes are released when things decay, rather than being the cause and that they are spread by miasama. | | **Anaesthetic:** Used to make someone unconcious.  **Antiseptic surgery:** Killing bacteria before operations.  **Aseptic surgery:** Operation that takes place in a strictly controlled germ-free environment.  **Inoculation:** Deliberately infecting a patient with a disease in order to become immune to it.  **Vaccination:** Injection of weakneed organisms to give body resistance against disease.  **Great Stink:** Exposed sewage on the River Thomas created awful smell near Houses of Parliament.  **Laissez-Faire:** Government’s attitude that it should not interfere with matters relating to Public Health. | |
| **Modern Britain**  **1900-present**  [Image result for cartoon of DNA](http://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwij-_H3joraAhUwsaQKHS6oBTEQjRx6BAgAEAU&url=http://www.how-to-draw-cartoons-online.com/dna-sequencing.html&psig=AOvVaw2meLUWPJ37MAxbaNJmKMkr&ust=1522158097195501) | | **Causes of illnesses** | | **Prevention and Treatment** | | **Individuals** |
| By 1900, scientists realised not all diseases were caused by microbes. Discovery of DNA (1953) meant scientists understood how hereditary diseases were caused. E.g. Down’s Syndrone. **Crick and Watson.**  **Lifestyle choices impact on health:** smoking, poor diet, alcohol, sharing of bodily fluids and exposure to excessive amounts of sun.  **Improvements in diagnosis:** X-ray, CT/MRI scans, ultrasound, Blood testing and pressure monitor. | | **Magic Bullets:** Salvarson 606. **Paul Ehrlich.**  **Antibiotics:** Pencillin discovered in 1928. **Alex Fleming.**  Mass produced for D-Day in 1944. **Florey and Chain.**  **High-tech medical/surgical treatement:** Dialysis, Prosthetic limbs, Keyhole surgery, ECG, Endoscope.  **Changes in care/treatment:** NHS: Hospitals, GP’s, dentists, ambulance services + health visitors.  **Government lifestyle campaigns:** *Change4life* + campaigns warning of dangers of drug/binge drinking. | | **Crick and Watson:** Discovered DNA (1953).  + = Scientists explore causes of hereditary diseases.  - = Doctors still unable to treat genetic conditions.  **Paul Ehrlich:** Created first Magic Bullet (1909).  + = Discovered Salvarson 606 to treat Syphilis.  - = Magic Bullet can only treat one specific disease.  **Alex Fleming:** Discovered Penicillin (1928).  + = Noticed ‘white mould’ killed bacteria - Penicillin.  - = Unable to fund further research + went no further.  **Florey and Chain:** Mass produced Penicillin (1944).  + = Developed Penicillin and mass produced it.  - = Reliance of USA for funding.  **Fight against Lung Cancer:**  **Diagnosis:** Difficult to diagnose early on.  **Treatment:** Transplants, radio/chemotherapy.  **Prevention:** Smoking banned in public places, raising age of buying cigarettes and stop smoking campaigns. |
| **Key Words** | | **Key Words** | |
| **DNA:** Carries genetic information about a living organism.  **Genome:** Each human being has a unique DNA.  **Human Genome Project:** Scientists worked to decode and map out the human genome.  **Hereditary diseases:** Diseases that are passed down from one generation to another. | | **Antibiotic:** Medicine that destroys the growth of bacteria inside the body.  **D-Day:** Allied forces in WW2 invade northern France.  **Magic Bullet:** Chemical that kills specific bacteria in the body.  **General Practitioner:** Community-based doctor who treats minor illnesses. | |
| **Paper 1**  **The British Sector of the Western Front,**  **1914 – 1918.**  [Image result for world war 1 cartoon images](https://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwif9aDVnoraAhVF16QKHQC0DbAQjRx6BAgAEAU&url=https://www.shutterstock.com/image-vector/cartoon-british-soldier-during-world-war-541241017&psig=AOvVaw1zq6915d_9qtQJtQbJlKBi&ust=1522162318831471) | **Context of the British sector of the Western Front** | | | | **Conditions requiring treatment on the Western Front** | | |
| **The Ypres Salient:** Germans had the advantage with being on the higher ground. Tunnelling and mines were used by the British at Hill 60.  First Battle of Ypres - 1914.  Second Battle of Ypres -1915.  Third Battle of Ypres - 1917. | | **The Somme:** Battle of the Somme - July-November 1917.  1st day of battle, 60,000 casualties and 20,000 died.  In total, 400,000 Allied casualties and this put pressure on medical services on the Western Front. | | **Ill health: Trench fever:** caused by body lice and included flu-like symptoms including high temperature. **Treatment:** Passing electric current through infected area was effective. **Prevention:** Clothes disinfected and delousing stations were set up. Affected 0.5 million.  **Trench foot:** caused by soldiers standing in mud/waterlogged trenches. **Treatment:** soldiers advised to keep clean but worst cases, amputation. **Prevention:** Changing socks + keeping feet dry and rubbing whale oil into feet. Affected 20,000 in winter of 1914-1915.  **Shell-shock:** caused by stressful conditions of war and symptoms included tiredness, nightmares, headaches and uncontrollable shacking. **Treatment:** Not well understood. **Prevention:** rest and some received treatment in UK. Affected 80,000 and some were shot!  **Weapons of war: Rifles:** fired one at a time/loaded from cartridge case creating rapid fire.  **Machine guns:** Fired 500 rounds a minutes. Pierced organs and fracture bones.  **Artillery:** Bombardments were continuous, Artillery fire caused half of all causalities.  **Shrapnel:** Caused maximum damage exploded mid-air above enemy. Killed/injured.  **Chlorine Gas:** Led to death by suffocation. 1915, gas masks given to all British soldiers.  **Phosgene Gas:** Faster acting than Chlorine but with similar effects. Could kill within 2 days.  **Mustard Gas:** Odourless gas, worked in 12 hours. Caused blisters, burn the skin easily. | | |
| **Arras:** Battle of Arras - 1917.  Before the battle, Allied soldiers dug tunnels below Arras.  Tunnels led to rooms and included an underground hospital. | | **Cambrai:** Battle of Cambrai -1917. 450 tanks used to advance on the German position, however, plan did not work because there was not enough infantry to support. | |
| **Impact of terrain on helping the wounded:** Difficult to move around, + night, communication was difficult, collecting wounded from No Man’s Land was dangerous. Stretcher bearers found it difficult to move around corners and transport of the wounded was difficult because of this. | | | |
| **Key words** | | | | **Key words** | | |
| **No Man’s Land:** Land between Allied and German trenches in WW1.  **Trenches:** Long, narrow ditches dug during the First World War.  **Ypres Salient:** Area around Ypres where many battles took place in WW1. | | | | [Image result for shrapnel](https://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwiMpNjnqoraAhWBzKQKHRAUBZQQjRx6BAgAEAU&url=https://www.militaryimages.net/threads/artillery-shells-shrapnel.5495/&psig=AOvVaw2cC3rscYhYxicgGYCwGtE0&ust=1522165573084560)**Gangrene:** When a body decomposes due to a loss of bloody supply.  **Shrapnel:** A hollow shell filled with steel balls or lead, with gunpowder and a time fuse. | | |
| **Helping the wounded on the Western Front** | | | | **The impact of the Western Front on Medicine** | | |
| **Evacuation route:** Survival depended on speed of treatment. Care improved as war progressed. 1914 – 0 motor ambulances but by 1915, it was 250. Ambulance trains were introduced, as well as, ambulance barges used along River Somme.  **Stretcher bearers:** Collect wounded, 16 in each battalion + 4 for each stretcher.  **Regimental Aid Post:** Always close to the front line and staffed by a Medical officer selected those who were lightly wounded/needed more attention.  **Field Ambulance and Dressing Station:** Emergency treatment for wounded.  **Casualty Clearing Station:** Large, well equipped station, 10 miles from trenches.  **Base Hospitals:** X-ray, operating theatre and areas to deal with gas poisoning.  **Underground hospital at Arras:** Running water, 700 beds and operating theatre.  **RAMC:** Involved medical officers and learnt about wounds never seen before.  **FANY:** Volunteer nurses, who helped the wounded and also drove ambulances. | | | | **The Thomas Splint:** Stopped joints moving and increased survival rates from 20 to 82%. Reduced infection from compound fractures.  **X-rays:** Developed in 1895, X-rays used to diagnose issues before operations. But there were some problems: X-ray could not detect all problems, were fragile and overheat.  **Mobile X-rays:** 6 operated on the front line, used to locate shrapnel and bullet wounds. Transported around in a truck and enabled soldiers to be treated more quickly.  **Blood Transfusions:** Blood loss = major problem. Blood transfusions used at Base Hospitals by a syringe and tube to transfer blood from patient to donor. Extended to CCS from 1917.  **Blood bank at Cambrai:** Adding Sodium Citrate allowed blood to be stored for longer. Blood was stored in glass bottles at a blood bank and used to treat wounded soldiers.  **Brain surgery:** Magnets used to remove metal fragments from the brain. Local anaesthetic.  **Plastic surgery:** Harold Gillies developed new techniques, skin drafts developed for grafts. | | |
| **Key words** | | | | **Key words** | | |
| [Image result for triage](http://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwiDzfuNn4raAhXDDewKHcE6C1AQjRx6BAgAEAU&url=http://www.emailoverloadsolutions.com/blog/e-mail-triage-basics&psig=AOvVaw24t3mXu3Pgsms7n8v526LJ&ust=1522162407353702)**FANY:** First Aid Nursing Yeomanry. Founded in 1907 by a soldier who hoped they would be a nursing cavalry to help the wounded in battle.  **RAMC:** Royal Army Medical Corps. This organisation organised and provided medical care. It consisted of all ranks from doctors to ambulance drivers and stretcher bearers.  **Triage:** A system of splitting the wounded into groups according to who needed the most urgent attention. | | | | **Compound Fracture:** Broken bones pierces the skin + increases risk of infection in wound.  **Debridement:** Cutting away of dead and infected tissue from around the wound.  **Gas Gangrene:** Infection that produced gas in gangrenous wounds.  **Mobile X-ray unit:** Portable X-ray unit that could be moved around the Western Front.  **Radiology department:** Hospital department where X-rays are carried out.  **Blood transfusions:** Blood taken from a healthy person and given to another person.  **General anaesthetic:** Putting a patient to sleep during an operation.  **Local anaesthetic:** Area being operated on is numbed to prevent pain + patient awake. | | |

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| Who discovered that Penicillin kills bacteria – and when? | Which **two** scientists were responsible for the discovery of DNA? | When did Pasteur announce his Germ Theory? | Put in order: *Aid Post Hospital*, *Clearing Station* and *Dressing Station*. |
| What were the Four Humours? | What was so important about the 1875 Public Health Act? (Mention two details to support your answer.) | What is shrapnel? | What did John Snow do to stop Cholera spreading in Soho, London, 1854? |
| Name **two** types of gas used as weapons. | Give **two** methods used to reduce deaths from Lung Cancer. | Give **two** ways people used to keep towns clean and healthy in Medieval England. | Give **two** reasons why changes were taking place in medicine by 1700. |
| **List** three ideas people had about the cause of disease in Medieval England. | Name **three** different kinds of medieval healers. | List **three** ways in which governments have tried to improve health since 1900. | List **three** kinds of treatments used in the Renaissance England. |
| Which **three** factors were most important in advancing in medicine in Modern Britain? | Why was Thomas Sydenham’s work important? | Why were there so many infected wounds on the Western Front? | Which **three** factors were most important in inhibiting change in medicine in Medieval England? |