

# Benefits of medical technology essay



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Michael Demimonde from the National Science Foundation says, “ Medical technology is the application of devices, procedures, and knowledge for diagnosing and treating disease for the purpose of maintaining, promoting, and restoring wellness while improving the quality of life. ” In other words, people apply devices and procedures that they have learned throughout time to improve the life they live in general. Doctors use devices such as x-ray machines and ultrasound machines to maintain and restore life. Modern-day ultrasounds can detect not only the sex of a fetus, but also indicate whether or not that fetus will have health problem.

X-ray machines help restore life. They can help doctors tell what is wrong with someone and fix that problem. Medical technology has provided hospitals with life support machines to keep people alive when, in the past, it would not have been possible. The quality of life has improved because doctors can now solve and cure many previously occurring problems. In the middle ages, misconceptions were often made. Some people thought that illnesses were brought on by God and there was nothing to be done about them except to repent for their sins (Truman). Doctors often used astrology to diagnose and treat their patients.

Urine charts were used as well. The color of the urine determined what treatment would be used (Truman). One other popular technique was bloodletting. If blood needed to be drained from a small area, a leech would be used, but if a large area needed to be drained, the doctors would pick a vein and slice it (Truman). In the forties, more vaccines were created to prevent disease, DNA was discovered, ultrasound and magnetic resonance

was used to diagnose disease, and surgical procedures were improved. The health of people in general is better with the help of medical technology.

In 1955 when President Eisenhower suffered a heart attack, the doctors' solutions were to have his wife cuddle with him at night to keep him warm, to inject him with morphine and other drugs that were not helpful for his illness, and to keep him on bed rest with limited activity for seven weeks (Alton). In the past, the doctors did not know that what they were doing was wrong. Now doctors have the knowledge they need to prevent and treat heart attacks correctly, the technology of CT scans, and new drugs to aid in the healing and treating of disease.

New medicines have been created also. Doctor Lawrence K. Alton says that he could prescribe around 7,000 drugs in the 1950s and now he can prescribe around 11,000 (Alton). Other technologies have improved as well. Dialysis is another gift of technology, aiding people who have kidney failure (Demimonde, Dogged, and Evans). It removes excess waste, controls blood pressure, and maintains safe levels of bodily chemicals. If someone has a problem with one of their joints, they can get artificial ones, such as knees and hips (Alton).

This most commonly happens due to arthritis and other physical injuries. Now, instead of just suffering, people can get brand new artificial bones that are now designed with more lubrication and padding to be more comfortable than in the past. Gallbladder surgery has also improved greatly. When someone gets their gallbladder removed, a laser makes only a few small incisions, when in the past, the abdominal muscles had to be cut, therefore

creating a long healing process (Alton). Medical technology can improve life and make it easier, but it can make things harder just the same.

With everything in life, especially with technology, there are both positive and negative sides. Although doctors now have a lot of new ways to help people, it has caused problems. One of these problems is the face-to-face time with doctors. Demimonde from the National Science Foundation says, “Technology has taken the assessments that used to be based on patient descriptions or doctor’s examinations and transferred them to medical, chemical, or radiological laboratories. The result has been an increase of accuracy at the expense of close doctor-patient relationships” (Demimonde, Dogged, and Evans).

This means that doctors do not spend as much time with their patients because machines and lab tests give them all the information that was previously provided by the patient. This is not as bad as people are making it out to be. The doctors still talk to their patients to get the appropriate information, so there is still contact. However, now lab tests and other technologies can provide more accurate diagnostics than ever before. This makes for easier treatments and a healthier and more peaceful life. Another big problem with medical technology is the controversy that arises.

For example, doctors now have the technology to perform abortions, but there are problems. Many people believe that abortion is wrong and consider it to be murder, while many others disagree. This causes an ongoing argument over what is ethical and what is not. Another example is allowing someone to live who has no quality of life. Although doctors have the

technology to allow people with serious injuries to live, would it be right to keep someone alive who could not do anything on his or her own? Would it be immoral to allow them to die? Price is also a problem.

One machine, such as a CT scanner, can cost \$8 million or more (“ Medical Technology”). The Office of Healthcare Access says that, “ the pharmaceutical industry spent over \$17 billion on research and development of new pharmaceuticals and nearly \$8. 3 billion marketing its products in 1998. ” This spending has gone up to about \$29 billion since then (“ Persuading the Prescribes”). Many people may argue that their money and resources can be better spent elsewhere, but if people did not spend it on developing new technology, many other illnesses could go untreated and another plague could occur.

More and more sissies are being discovered every year. If something like this were to happen, great loss of life, money, and resources could be expected. Medical technology definitely has its benefits. The lives of people today have definitely been better than the lives of the people in the past as a result of to medical technology. Although there are still problems to worry about, there are a lot less of them now. For example, in the past doctors had no way of knowing if someone would get cancer or not. Now, with the help of advanced microscopes, they can detect if someone will get cancer simply without looking at his or her DNA.

People who have a history of cancer in their family no longer have to sit around worrying about when and if they will get it. They can get tested and either relieve their worry, or take the necessary precautions to prevent it.

They also will be able to avoid taking actions that were not needed in the first place. One woman was just about to get bilateral prophylactic mastectomy, which is the removal of both breasts, in order to prevent cancer that she did not have yet, and had no way of knowing whether or not she would contract it in the future.

However, he took a chance and got tested and found out that she had little to no chance of developing cancer because she did not have the gene for it (Episode 4: Curing Cancer). Also, diseases that have been fatal in the past have now been cured, and some have even been eradicated. Although there are still diseases, people do not have to worry about them as much. Due to medical technology, people can save themselves a lot of trouble and worry. An ounce of prevention is surely worth a pound of cure. In the future, the threat of disease could potentially decrease even more. The future holds many new technologies.

Researchers are working on developing new brain cells from urine. The waste cells can be modified to create progenitor cells, which are the main components of brain cells (Handle). Testing has already begun, and so far no problems have arisen. Researchers are also looking into “printed bones” which combine the printed bone material with stem cells and grow the bone back at an accelerated rate (Handle). Human powered pacemakers are being looked in to. The vibrations of the inner ear rather than batteries will power the pacemaker, eliminating the costs of another surgery to change the batteries (Handle).

One other major technology of the future will be stimulating the tongue to repair minor brain damage. Since the tongue is connected to many nerve clusters connected to the brain, stimulation can help reverse brain damage (Handle). In conclusion, the world could not function without medical technology. People use it in their everyday lives and rely on it in times of need. Without medical technology, people would not be able to lead the lives they live today. It insures that people lead a more enjoyable and virtually stress-free life.