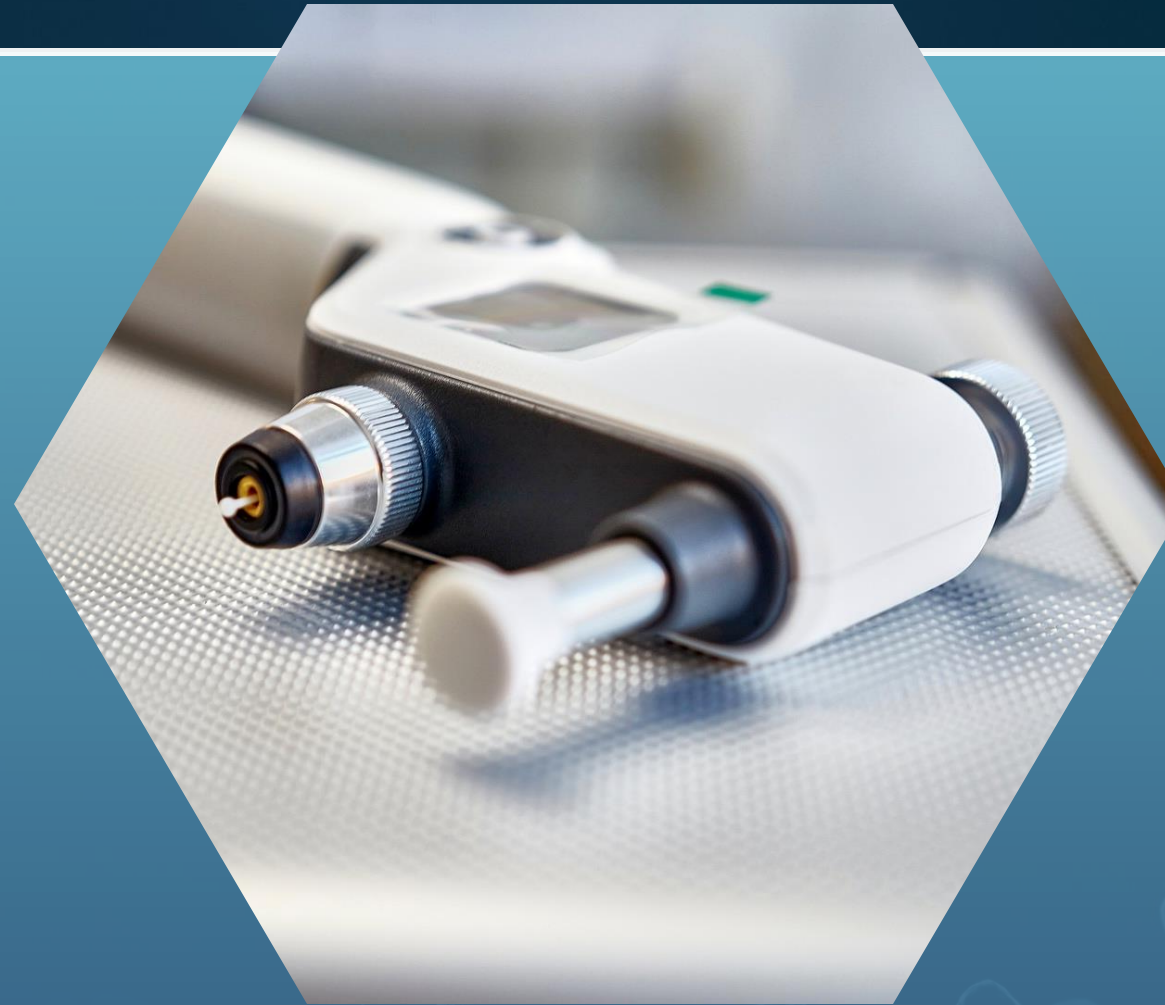


# TECHNOLOGY IN HEALTHCARE

Webography Project  
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# INTRODUCTION

Healthcare technology is the use of technology that aids healthcare practices and administrative productivity. This includes medical devices, artificial intelligence (AI), Telehealth, and more. Healthcare technology, also referred to as "HealthTech", is now a major part of modern healthcare. Technology has been used to improve the healthcare industry to provide better care, easier access, and boost important research and development.



# HOW HEALTHCARE TECH IS USED

- administrative functions like scheduling and billing using spreadsheet programs
- data collection in research
- assistance in surgeries using robots and AR (Augmented Reality)
- disease diagnosis and treatment
- medical imaging
- Telehealth
- drug development
- wearable health trackers
- EHRs (Electronic Health Records)





# WHAT'S THE GOAL OF USING HEALTHTECH



**ONE**

Better Quality of Care



**TWO**

Increase efficiency



**THREE**

Lower Costs



**FOUR**

Provide patients with options for their care





# HISTORY OF HEALTH TECHNOLOGY



**< 1800S**

Inventions like the mercury thermometer, stethoscope, and microscope were early revolutionary tools



**1895**

The discovery of X-Ray technology



**1970S**

Computer technology merges with healthcare. Computers store health records and control instruments



# HISTORY OF HEALTH TECHNOLOGY



**1977**

Full body MRI scanner  
is constructed



**2000S**

Telehealth starts  
emerging



**TODAY**

3D printing, AI,  
Virtual/Augmented  
Reality, Wearable Tech,  
Robots





# WHAT THESE TECHNOLOGIES DO



## RADIOLOGY

uses rays to capture images through the body allowing healthcare professionals to see what's going on in the body without invasive procedures



## WEARABLE TECH

Wearable technology uses sensors and scanners and brings a new benefit to healthcare by providing continuous monitoring of health signs like heart rate, sleep, physical activity, and more.



## ROBOTICS

ranges from surgical robots that are programmed to do specific tasks in surgeries, robotic companions that can aid in mental health and people who may not be physically able to complete tasks, and exoskeletons that are controlled by the brain that can help disabled use their bodies



# WHAT THESE TECHNOLOGIES DO



## AUGMENTED REALITY

they can provide further assistance with diagnosis and treatment compared to what we used in the past by displaying information and images that doctors pay need during surgery



## 3D PRINTING

3D printing has a bright future since the healthcare industry plans to make organs so that we aren't reliant on the donor system anymore. However, today 3D printings abilities are limited to producing casts, prosthetics, surgical preparation devices, pharmaceuticals, and more



## EHRs (ELECTRONIC HEALTH RECORDS)

Patient information is stored on computer programs more accessible across different providers and has a lesser chance of being lost or things being missed





## CHALLENGES/CONCERNS

- chance of data being hacked and patient records being leaked
- advanced technology can be very costly for facilities to operate
- Machinery also can spew out inaccurate results if they aren't updated or maintained properly
- always the need to adapt and train for the use of new things
- People fear that their jobs would be replaced by robots and AI



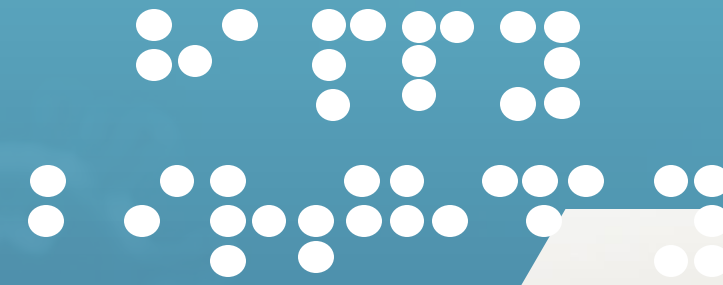
## BENEFITS

- improves efficiency because it makes wait times shorter, and procedures are being done faster with the use of technology
- improves accessibility for populations that may not have access due to distance or money, and the use of technology can possibly lower healthcare costs over time
- allows for further research to be done in the field that will advance the field faster than we could previously do
- improves the quality of care by tailoring the experience for every single patient, which helps with patient satisfaction



# CONCLUSION

From the start of healthcare practices, innovators have looked for ways to do tackle we previously thought were impossible. Innovations over the years have allowed us to provide treatment for disease, identify previously unknown diseases, and make the jobs duties within the healthcare system more seamless and organized. We've seen and discovered things about the body that would've been unimaginable in the past . With each new tool and device, the potential to broaden the understanding of medicine expands, which gives us nearly limitless room to grow .







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