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# The Introduction and Revolution in Monitoring and Diagnosis through Artificial Intelligence in Modern Health Sciences

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ARYAMAN DUBEY<sup>1</sup>

## ABSTRACT

*Artificial intelligence (AI) has transformed healthcare, notably in terms of patient monitoring and diagnostics in the healthcare sector AI is presently used extensively in healthcare to improve the accuracy of assessment of potential diseases and treatments available, speed and processing time of data, and reliability of the outcomes.*

*It is well-known for its learning and problem-solving ability. This paper explores how AI is changing operations related to monitoring and diagnosis. We are able to understand the significant impact of AI on healthcare practices by looking at the applications that are now in use, their effects, and the challenges that arise in actual medical settings.*

**Keywords:** *Artificial Intelligence, healthcare and patient monitoring, diagnostics, machine learning, and predictive analytics, predictive analysis, data quality, integration, disease identification, operative behaviour, data driven, medical imaging.*

## I. INTRODUCTION

The introduction and constructive integration of Artificial Intelligence (AI) has in the health sector has been a perfect catalyst due to excellent efficiency in working and accuracy it provided in disease diagnosis and patient monitoring. The Black Box researchers at Mount Sinai Hospital developed a deep learning algorithm using data from 700,000 patients and the algorithm displayed significant accuracy in predicting the start of an illness like schizophrenia.<sup>23</sup> This result is remarkable because medical professional face difficulties diagnosing this disease. These Artificial Intelligence (AI) algorithms display their unique ability to learn and store vast amounts of medical data, these large of medical data has enabled the creation and development of predictive models that assist the doctors and medical practitioner in early diagnosis and detection of diseases to save patient's life and prevent more damage, create personalized treatments plans and do a continuous patient care also. Despite these

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<sup>2</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6918207/>

<sup>3</sup> Ms Priya Singh and Dr. Juhi Aggarwal, "Artificial Intelligence in Medical Education ", Artificial Intelligence (AI) New Horizons in Health Sciences (March 2024)

developments, the incorporation of AI into healthcare poses important ethical, legal, and social challenges that must be addressed in order for it to be used responsibly and beneficially.

### **A. Literature Review**

An extensive analysis of the available data demonstrates the various ways in which AI is affecting healthcare. For example, research by Rajpurkar et al. (2017) and Esteva et al. (2019) shows that AI can use specialised computer programmes to identify skin cancer and pneumonia just like doctors can. Thus, AI may facilitate faster and more accurate diagnosis by medical professionals. AI is also being used to continuously monitor patients, particularly those in severe condition. This aids in the early detection of any issues, which is crucial in circumstances when prompt intervention can save lives. However, this literature review points to other difficulties as well. For instance, we must ensure that AI respects human privacy and has access to sufficient high-quality training data. Additionally, there is a chance that AI will operate unfairly. Overcoming these challenges will need teamwork from researchers, doctors, and policymakers.

### **B. Central Question**

How has AI transformed disease diagnosis and patient monitoring in healthcare, and what are the potential ethical, legal, and social implications for the future of medical practice?

### **C. Methodology**

My methodology is to examine multiple research papers, compare case studies with different countries, collecting data and information regarding how the industries have incorporated AI in their day-to-day operations and how effective and promising and beneficial is it for them to have it and how AI companies are developing their AI tools and services

## **II. BRIEF BACKGROUND**

Artificial intelligence (AI) is the theory and development of computer systems that can do activities that previously needed human intelligence, such as speech recognition, decision-making, and pattern recognition. AI refers to a wide range of technologies, including machine learning, deep learning, and natural language processing (NLP).<sup>4</sup>

Although the word is often used to describe a variety of current technologies, many people disagree on whether they constitute artificial intelligence. Instead, some claim that much of the technology utilized in the real world today is actually very advanced machine learning, which is only the first step toward true artificial intelligence, or "general artificial intelligence" (GAI).

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<sup>4</sup> <https://pubmed.ncbi.nlm.nih.gov/26044081/>

Despite many philosophical disagreements about whether "true" intelligent machines exist, most people today use the term AI to refer to a suite of machine learning-powered technologies, such as Chat GPT or computer vision, that allow machines to perform tasks that were previously only performed by humans, such as generating written content, steering a car, or analysing data.

Some examples of Artificial intelligence

At its most basic, with the use of machine learning employs algorithms trained on data sets to generate machine learning models that enable computer systems to do tasks such as song suggestions, determining the shortest route to a location, and translating text from one language to another. Some of the most common instances of artificial intelligence in use today are:

- A. ChatGPT uses large language models (LLMs) to generate text in response to inquiries or comments.
- B. Google Translate uses deep learning algorithms to convert text from one language to another.
- C. Netflix uses machine learning algorithms to provide personalized recommendation engines for users based on their viewing behaviour.
- D. Tesla uses computer vision to power self-driving technologies in their vehicles.<sup>5</sup>

In the paper I will narrow down my research regarding AI's role in the health industry / sector and impacts and future implications

### III. WORKING OF ARTIFICIAL INTELLIGENCE (AI)

**Artificial Intelligence (AI):** The main concept is Artificial intelligence (AI) . The idea focuses on creating smart and intelligent machines that are capable to carry out tasks and functions which are often performed by humans which require human intelligence and skills.

**Branches of AI:** Three branches emerge from the central AI node:

- a. Machine learning (AI)
- b. Natural Language Processing (NLP)
- c. Robotics

#### A. Machine Learning (ML)

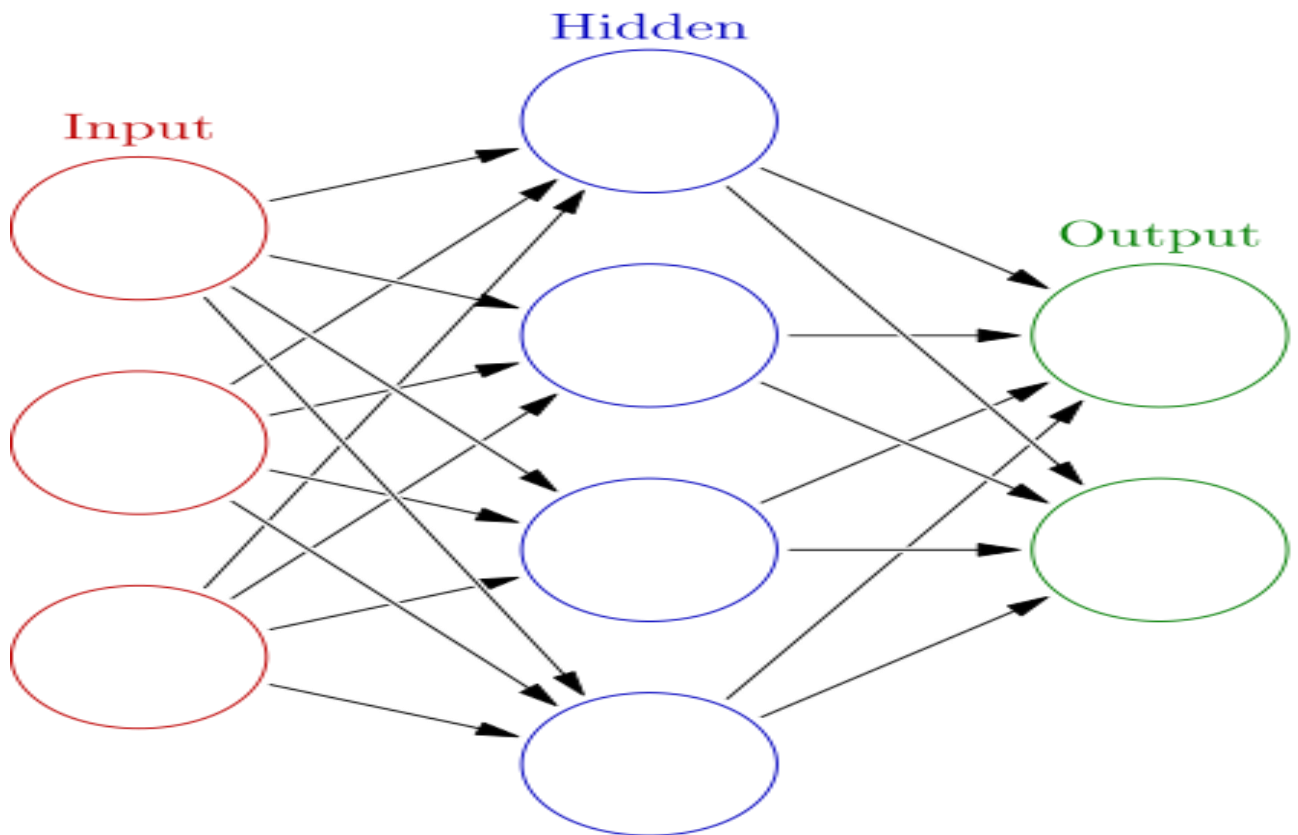
In this branch of Artificial Intelligence (AI) a lot more emphasis is shown on statical models and algorithms that allow the systems to perform the specified tasks and functions without the need to provide instructions because that job is done by the algorithms itself, they also use

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<sup>5</sup> <https://www.coursera.org/articles/what-is-artificial-intelligence>

patterns through datasets to draw inference and provide a prediction.

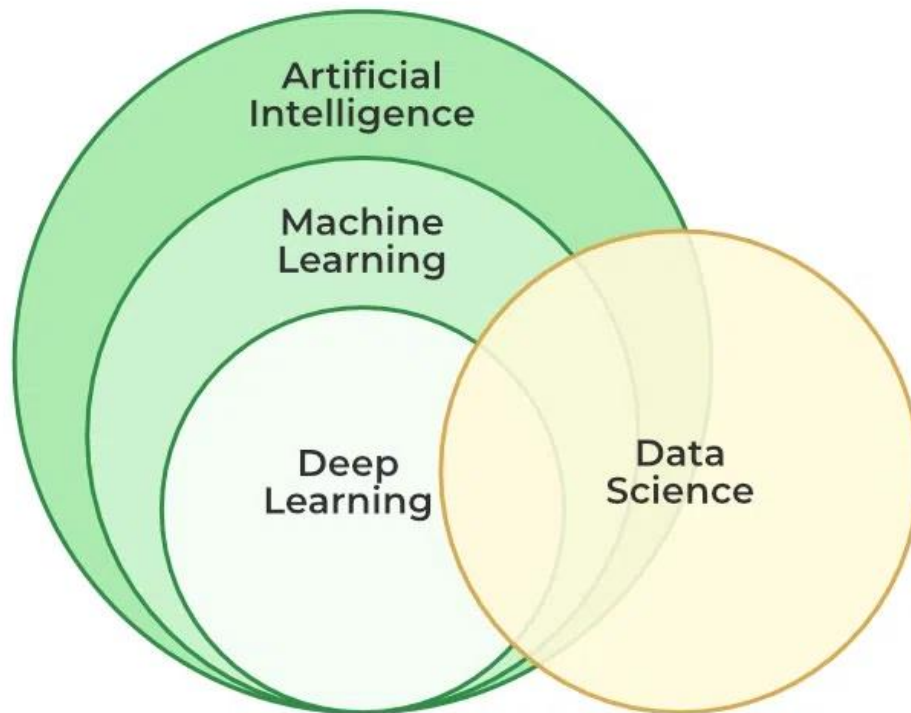
The computing systems called as Artificial Neural Networks (ANN) are modelled after the structure and function of biological neural networks seen in animal brains.<sup>6</sup>



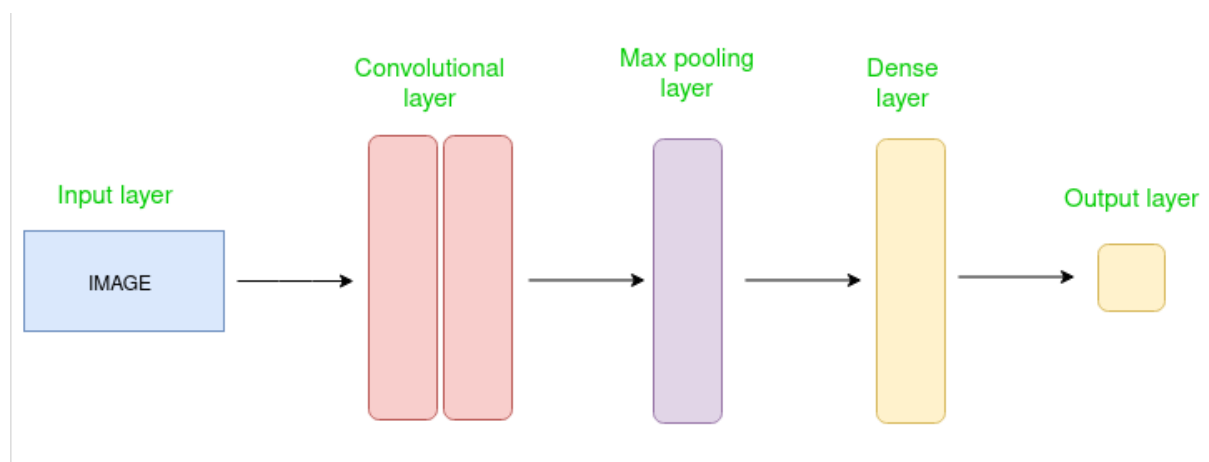
Deep Learning (DL): A subset of machine learning that uses neural networks with multiple layers (deep networks) to examine various data attributes. It uses many layers of interconnected nodes called neurons that work together to process and learn from the input data.

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<sup>6</sup>[https://en.wikipedia.org/wiki/Neural\\_network\\_\(machine\\_learning\)#:~:text=In%20machine%20learning%2C%20a%20neural%20network%20%28also%20artificial,function%20of%20biological%20neural%20networks%20in%20animal%20brains\\_](https://en.wikipedia.org/wiki/Neural_network_(machine_learning)#:~:text=In%20machine%20learning%2C%20a%20neural%20network%20%28also%20artificial,function%20of%20biological%20neural%20networks%20in%20animal%20brains_)



Convolutional Neural Network (CNN): A type of deep neural network that is mostly used to analyse visual imagery. This method is well suited for image and video analysis.<sup>7</sup>



## B. Natural Language Processing (NLP)

This is a different branch of AI that works with the interaction of computers and humans using natural language. The goal is for computers to handle and evaluate massive amounts of natural language data.

## C. Robotics

This field deals with the design, construction, operation, and application of robots, which are

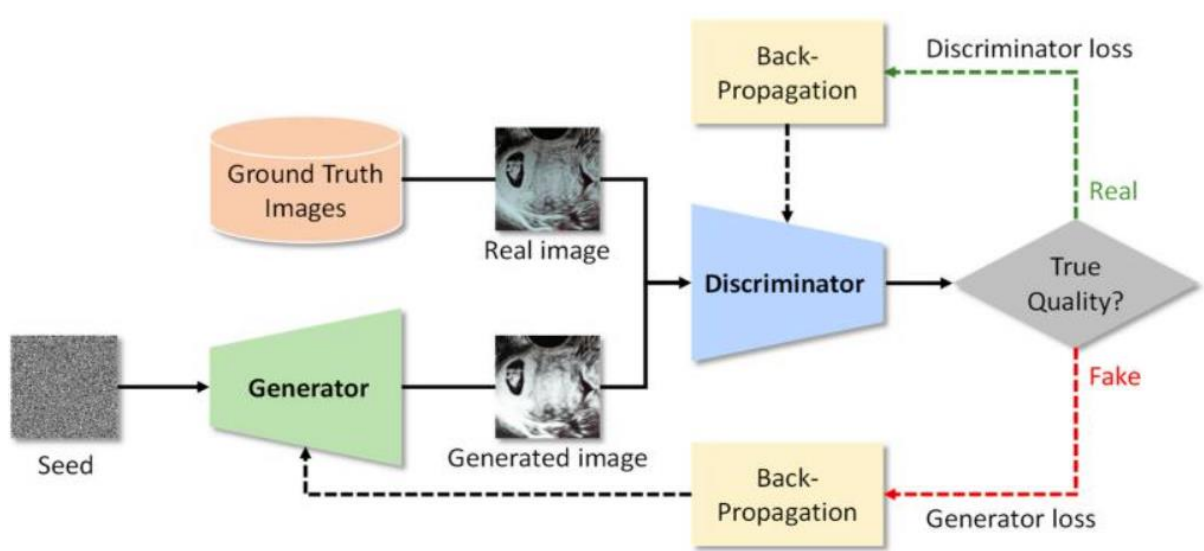
<sup>7</sup> <https://www.geeksforgeeks.org/introduction-convolution-neural-network/>

often used to do activities that people find difficult or dangerous for example complicated surgeries of long hours which require extreme precision and concentration which is difficult for a human to make but not for a machine.

#### IV. ARTIFICIAL INTELLIGENCE ROLE IN HEALTH INDUSTRY AND SECTOR

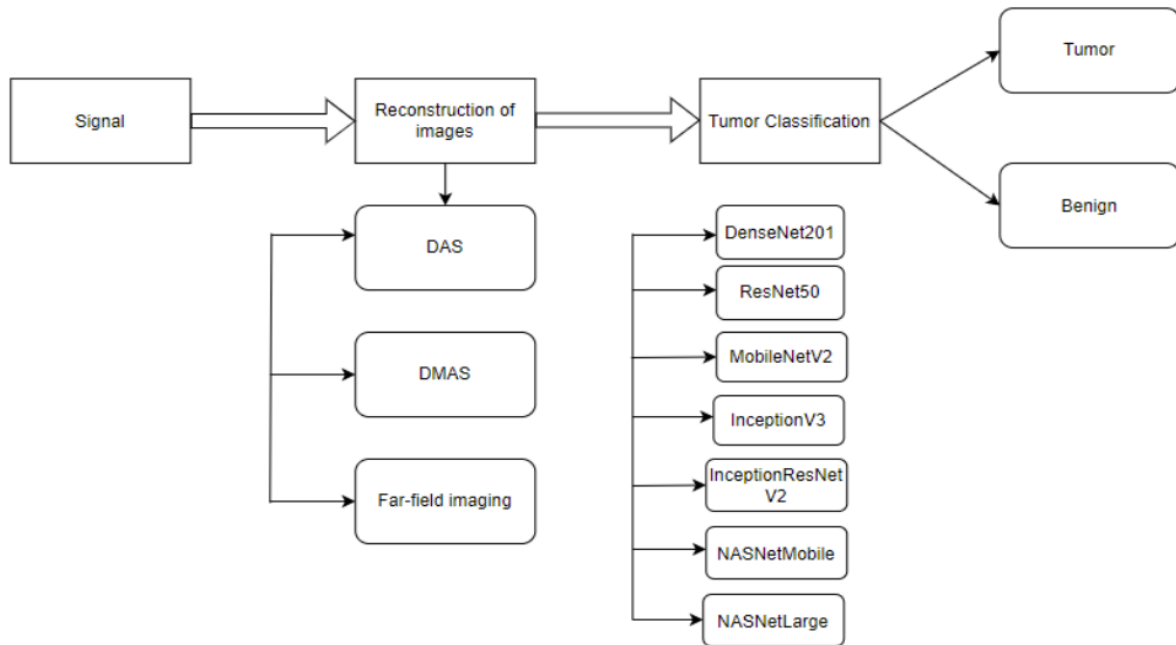
Artificial intelligence (AI) has implications in every aspect of the healthcare and pharmaceutical industries, from identifying and developing novel life-saving medicine to customizing treatment programs for specific patients to provide predictive images for disease development. Some of the possibilities for generational AI in healthcare are:

- A. Generative AI can enhance medical images such as X-rays and MRIs, synthesize images, rebuild images, and generate image reports. This technology can also generate new visuals to show how a disease will grow over time. It further helps in treatment planning, diagnosis and in monitoring .



These networks together operate in an adversarial training process, with the generator constantly improving its ability to create realistic data and the discriminator developing its ability to distinguish between real and fake data and create more realistic and reliable images to deliver data for diagnosis and treatment of potential diseases.

There is also a proposed framework to detect Breast Cancer, in this method medical imaging uses the delay-and-sum (DAS) beamforming technology to create a three-dimensional image.



The above displayed technique begins with processing the signals broadcast and received by the transmitting and receiving antennas, respectively. After determining the position of the antenna, focal point, and predicted wave propagation speed, then each received signal is assigned an appropriate time delay. Spatial beamforming occurs when the focal point moves within the breast during the focusing phase.

- B.** Discovering new drugs: Researchers can utilize generative artificial intelligence, also known as generative design, to investigate and develop novel medicines. Gartner predicts that 30 percent of new medications developed by researchers in 2025 will employ generative design concepts. One simple example is Markov chain, which helps to predict the next word in our text<sup>8</sup>, we observe that while writing out emails, WhatsApp, Google search bar etc.
- C.** Simplify chores with patient notes and information: Healthcare professionals keep and record notes on patients' medical care. Generational AI can construct patient information summaries, transcripts of verbally recorded notes, and discover critical details in medical records more efficiently than humans can.
- D.** Personalized treatment: Generative AI may use a huge quantity of patient data, such as medical pictures and genetic testing, to provide a treatment plan that is personalized to the patient's specific needs.<sup>9</sup>

<sup>8</sup> <https://www.csail.mit.edu/news/explained-generative-ai>

<sup>9</sup> <https://www.coursera.org/articles/generative-ai-applications>



**E. Robotics:** This field deals with the design, construction, operation, and application of robots, which are often used to do activities that people find difficult or dangerous for example complicated surgeries of long hours which require extreme precision and concentration which is difficult for a human to make but not for a machine.<sup>10</sup>

## **V. TRANSFORMATION CAUSED IN DISEASE DIAGNOSIS AND PATIENT MONITORING IN HEALTHCARE DUE TO ARTIFICIAL INTELLIGENCE AI**

### **A. Increased in accuracy of Diagnostic processes**

The algorithms of AI are based on machine learnings and deep learnings and they have assisted in improvement of accuracy of disease diagnosis, for example due to large number and good quantity of data sets the AI software are able to analyse thousands of medical images to detect anomalies such as tumours, fractures and its types such as simple or compound, detecting neurological diseases with high level of precision. Today large-scale datasets from patient records and medical literature can be processed and interpreted by IBM Watson Health to help with diagnosis and therapy planning.<sup>11</sup>

### **B. Increase in Speed and Efficiency**

The AI software operate and function without nay break and process large amount of data, they read and analyse data faster than any human doctors and are able to provide diagnosis at a speedy rate also, since time is a crucial factor in medical situations such as heart attack, stroke, then every minute is important to save a life. Besides AI can function 24/7 without any breaks, providing assistance for continuous disease monitoring, giving out alerts to the medical staff regarding health of patient without any delays.

### **C. Accessibility of AI**

With fast speed internet and long range connectivity, the AI can reach in any part of the globe, especially in far and remote areas where the medical infrastructure is not up to the mark and provide correct medical diagnosis also, then further the AI can be enabled and equipped with those capabilities that provide basic diagnostic assessments, then a telemedicine platforms to priced correct medicines with the right dosage also. These will able to bridge the gap of medical assess among the various sections of people in the society.

AI can extend the reach of diagnostic services, particularly in underserved or remote areas where medical expertise is scarce. Mobile health applications and telemedicine platforms

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<sup>10</sup> <https://www.simplilearn.com/future-of-robotics-article>

<sup>11</sup> <https://newsroom.ibm.com/2021-11-30-IBM-Watson-Health-Introduces-New-Opportunities-for-Imaging-AI-Adoption>

equipped with AI capabilities enable basic diagnostic assessments for patients who otherwise might not have easy access to healthcare services.

#### **D. Monitoring technology of AI**

The best example is the wearable technology the AI have been put through the AI algorithms which can easily monitor the vital signs and also predict some potential health issues and also recommend the user beforehand to make preventive measures, this is observed in devices likes smartwatches that monitor sleep pattern, heart rate, etc., and alert the doctors and users beforehand.

| <b>What?</b>   | <b>Where?</b> | <b>Why?</b>   |
|--|---------------|---|
| <b>Immersive technology<br/>Military apparel<br/>Helmets<br/>Mixed reality<br/>Smart contact lenses<br/>Trackers</b> | Head          | Education<br>Behavior change<br>Intelligence to intelligence<br>communication |
| <b>Hearing aids<br/>Headphones<br/>Trackers</b>  | Eyes          | Blood glucose levels  |
| <b>Odor detection<br/>Smart tattoos<br/>Trackers<br/>Patches<br/>Implantables<br/>Smartwatch<br/>Trackers</b>        | Ears          | Sound   |
| <b>Clothing<br/>Chest straps<br/>Implantables<br/>Trackers<br/>Exoskeleton</b>                                       | Nose          | Smell   |
| <b>Clothing</b>  | Arms/Wrist    | Blood glucose<br>Blood pressure<br>Oxygen saturation<br>Ketone levels         |
| <b>Embedded footwear</b>   | Body          | Rehabilitation  |
|  | Legs          | Protection<br>Rehabilitation  |
|  | Feet          | Health metrics<br>Posture correction<br>Rehabilitation                        |

<sup>12</sup>The above able displays Applications of wearable technology

<sup>12</sup> Machine Learning Ch 7 Future of healthcare 2023

### **E. Predictive Analysis**

Using the data from the data sets and real time inputs to update information the AI software can assist the AI models to predict the risks and outcomes in a better and more accurate manner due to more information availability and can be used in intensive care units such as patients in vegetative state for example coma to anticipate acute vents and allow medical staff to prepare accordingly.

### **F. Personalized Treatment Plans**

The AI can provide a more personalized approach to a patient's treatment by processing more data which is specific to the patient health and genetic information to make a personal treatment plan to improve his/her health in a more positive manner with less side effect as well.

### **G. Routine Care**

AI could help in scheduling the daily routine tasks such as planning and scheduling meetings with the doctor, effective doctor to patient communication, lower the the work pressure on the medical staff thus enabling them to focus on more crucial and complex cases which require their presence.

### **H. Advanced Robotics**

At present the surgical robots are in use, the idea is to develop AI algorithms in such a manner to enhance the precision and autonomy of the robots to enable them to perform minor surgeries supervised by the doctors.

Example "Vicarious Surgical's Robotic System is a surgical robot, it equips the surgeons with a console and a robot with tiny human-like arms for more precise operations. Fitted with 28 sensors per arm, the company's robot imitates surgeon's movements and displays impressive rotational capabilities. Outfitted with a camera, Vicarious Surgical's robot allows surgeons to get a better look at a patient's anatomy while making incisions as small as a centimetre for minimally invasive procedures".<sup>13</sup> We are seeing how robotics and tech companies are working together in the health industry.

Here are five instances from various nations that highlight the potential of AI in healthcare:

- a.** Stanford University researchers in the United States created an artificial intelligence system that can identify skin cancer by examining pictures of skin blemishes. Using deep learning techniques and using variety of data sets, an AI system showed diagnostic abilities comparable to those of dermatologists with board certification. This

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<sup>13</sup> <https://builtin.com/robotics/surgical-medical-healthcare-robotics-companies>

development may make dermatological screening more accessible, especially in underprivileged areas<sup>14</sup>.

- b.** China is screening for diabetic retinopathy, a disorder that can result in blindness if left unchecked, using artificial intelligence in ophthalmology. A Chinese startup called IDx-DR developed an AI system that was approved for usage in identifying the ailment. Without requiring a human to examine the photos, this AI system diagnoses retinopathy by analyzing <sup>15</sup>retinal scans for indications of the condition. This can facilitate and expedite the diagnosing process.
- c.** Google's DeepMind in the UK created an AI that can help with computerized tomography (CT) scans for the early diagnosis of lung cancer. The algorithm's excellent accuracy in identifying and differentiating between benign and malignant lesions is essential for the prompt treatment of lung cancer.<sup>16</sup>
- d.** A real-time, portable AI-powered device that patients can use to monitor their cardiac health has been developed by an Indian business. By assisting in the non-clinical detection of arrhythmias and other cardiac problems, this gadget encourages proactive medical care<sup>17</sup>.
- e.** In Sweden, researchers are investigating the use of AI to treat prostate cancer in conjunction with robot-assisted surgery. Real-time data analysis from the AI helps surgeons make better decisions while doing operations. AI algorithms are now being used to customize cancer treatment regimens and forecast patient outcomes<sup>18</sup>.
- f.** Concerns like protecting patient privacy, upholding data security, correcting biases in AI algorithms, providing fair access to technology, and delineating the boundaries between machine and human decision-making in clinical settings must all be addressed as AI continues to revolutionize healthcare. We can minimize the hazards and fully enjoy the advantages of AI by tackling these issues.

## VI. SOCIAL AND ETHICAL ISSUES

While AI holds great promise in transforming healthcare, its integration also gives rise to several social and ethical issues. One major concern is data privacy and security. The vast

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<sup>14</sup> <https://news.mit.edu/2021/artificial-intelligence-tool-can-help-detect-melanoma-0402>

<sup>15</sup> <https://www.nature.com/articles/s41391-023-00684-0>

<sup>16</sup> <https://www.nature.com/articles/d41591-024-00016-2>

<sup>17</sup> <https://www.ft.com/content/77bf38b7-114d-44c8-956e-1e39e39ecb52>

<sup>18</sup> <https://www.aaof.org/education/headline/first-ai-screen-diabetic-retinopathy-approved-by-ff#:~:text=The%20IDx-DR%20software%20is%20designed%20for%20use%20by,specialist%20to%20scan%20images%20for%20signs%20of%20DR.>

amount of sensitive patient data collected and analysed by AI systems raises questions about how this data is stored, shared, and protected. Unauthorized access to this data could lead to breaches of patient confidentiality and undermine trust in the healthcare system.

Another critical issue is algorithm bias and transparency. AI algorithms are only as good as the data they are trained on, and biases present in the training data can result in discriminatory outcomes. It is essential to ensure that AI systems are developed and tested using diverse and representative datasets to mitigate bias and promote fairness in healthcare decision-making.

Moreover, the lack of accountability and transparency in AI systems poses challenges in understanding how decisions are made and who is responsible for errors or adverse outcomes. As AI becomes more autonomous, the issue of accountability becomes increasingly complex, raising questions about liability and ethical decision-making in healthcare settings.

## **VII. EXAMPLES**

One example of the social and ethical issues surrounding AI in healthcare is the use of predictive analytics in patient care. While predictive models can help identify at-risk patients and improve outcomes, there are concerns about the potential misuse of this technology. For instance, if predictive models are used to deny insurance coverage or employment opportunities based on health predictions, it could lead to discrimination and harm to individuals.

Another example is the deployment of AI-powered diagnostic tools that may inadvertently reinforce existing health disparities. For instance, if AI algorithms are trained predominantly on data from certain demographic groups, they may not perform as accurately for underrepresented populations, leading to disparities in healthcare access and outcomes.

Additionally, the use of AI in decision-making processes, such as triaging patients or recommending treatment plans, raises ethical dilemmas regarding patient autonomy and informed consent. Healthcare professionals must navigate the balance between relying on AI recommendations and upholding the patient's right to make informed choices about their care.

### **A. Case Study 1: Bias in AI Diagnostic Tools**

In a study conducted by researchers at MIT, it was found that a popular AI-powered diagnostic tool used in healthcare settings exhibited racial bias in its recommendations. The algorithm, trained on historical patient data, consistently underdiagnosed certain conditions in patients from minority ethnic groups. This bias led to disparities in healthcare outcomes, with patients from these groups receiving delayed or incorrect diagnoses compared to their counterparts.

This case study highlights the importance of addressing bias in AI systems used for monitoring and diagnosis in healthcare. It underscores the need for diverse and representative datasets to

train AI algorithms to ensure that the technology does not perpetuate existing disparities in healthcare delivery<sup>19</sup>.

### **B. Case Study 2: Privacy Concerns in Remote Monitoring Systems**

A healthcare provider implemented a remote monitoring system powered by AI to track patients' vital signs and health metrics in real-time. While the system proved to be effective in alerting healthcare providers to potential health issues early on, concerns were raised about the privacy and security of the patient data collected.

Patients expressed worries about the confidentiality of their health information and the possibility of unauthorized access to their data. Additionally, questions were raised about how long the data would be stored, who would have access to it, and how it would be protected from cyber threats.<sup>20</sup>

This case study highlights the social and ethical implications of using AI-powered remote monitoring systems in healthcare. It underscores the importance of robust data protection measures, transparent data governance policies, and clear communication with patients regarding the use and storage of their health data.

These case studies highlight the real-world problems and ethical quandaries that result from the use of AI in monitoring and diagnosis in current health sciences. They underline the importance of taking proactive steps to overcome prejudice, protect data privacy, and adhere to ethical norms while developing and using AI technology in healthcare settings.

## **VIII. CONCLUSION**

The emergence of artificial intelligence in society has received critical acclaim. While some praise it as a technological advancement, others regard it as a necessary evil. But one thing is certain: AI is here to stay, and it will only improve. Some people are concerned that AI will not be a welcome development due to its significant impact on the employment market and humanity in general. Most of the time, some people engage in bogus arguments about what the arrival of AI may signify for the populace, resulting in open questions and endless debates regarding this technology.

So, when are these machines expected to overthrow humans or surpass human-level intelligence? Is it even possible? The problem of ultimate certainty plagues the human race. We have often talked about getting superhuman AI in the 21st century. We often over-hype technology, and AI is in the centre of it all.

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<sup>19</sup> <https://www.nature.com/articles/s41746-024-01106-8>

<sup>20</sup> <https://wires.onlinelibrary.wiley.com/doi/10.1002/widm.1485>

In the healthcare sector, the use of AI presents many organizations with numerous exciting opportunities. Within a short period of time, healthcare can be drastically improved, that too with saving costs. But there is a need to put autonomous systems in order just in case the deployment of AI may affect the workforce. However, the existence of AI is to be a support system to healthcare givers in various institutions as opposed to the general opinion that believes human employment in the healthcare sector may be threatened by this technology.

Few examples of what AI promises to deliver include scan analysis, sample analysis, taking records of vital signs in patients, and all of which that decide their final treatments by the presiding doctor. The development of new drugs follows some sort of guesswork or deployment of instincts by the scientists who select target molecules from a combination of chemicals. Even though AI is termed the 'experimentalist's helper,' it promises to perform this task with more efficiency and effectiveness.

In understanding diseases, healthcare professionals are skilled at this, but the technology serves as a booster in making better and reliable clinical decisions to fast-track innovations. In short, natural intelligence is supposed to be augmented by AI, and this places it second to human intelligence.

#### **A. Moving forward**

It has been predicted that AI will hit healthcare in the most shocking way. The predicted steps include:

- a. Care and management of chronic diseases
- b. Increasing the availability of health data of patients
- c. Environmental and socio-economic facets of medicine
- d. Precision medicine and genetic information integrated with care management

Pharmaceutical companies are also joining the bandwagon of the game of technology, and these people are expected to make the best impact. The development of drugs requires efficiency, which AI is capable of to a great extent. Nevertheless, the worry that AI may replace healthcare providers is just a product of fear and illusion. The technology promises to be a wingman or a research assistant. After all, what better machine is there than the human brain? In the not-so-distant future, the expenditure on machine intelligence will be very high, contributing immensely to the business of saving lives. More so, when an error can cost the life of a person, one has to be 100% certain about the procedures. Machines should be given a chance to make this difference.

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**IX. REFERENCES**

- A.** Pradanajati Aryawibowo, Alvian Faiz Hidayanto, Yeremia Marcellius Toemali ...Intelligent Monitoring and Diagnosing Capability in Healthcare: Systematic Literature Review 2023 International Conference on Information Management and Technology (ICIMTech)
- B.** Dr. Sumangala Patil... The Role of AI in Monitoring and Diagnosing Capabilities 2023
- C.** Esteva, A., Kuprel, B., Novoa, R. A., Ko, J., Swetter, S. M., Blau, H. M., & Thrun, S. (2019). Dermatologist-level classification of skin cancer with deep neural networks. *Nature*, 542(7639), 115–118.
- D.** Rodriguez-Ruiz, A., Lång, K., Gubern-Merida, A., Broeders, M., Gennaro, G., Clauser, P., ... & Mann, R. M. (2019). Stand-Alone Artificial Intelligence for Breast Cancer Detection in Mammography: Comparison with 101 Radiologists. *JNCI: Journal of the National Cancer Institute*, 111(9), 916-922.

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