

# Role of Artificial Intelligence in Healthcare

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## ABSTRACT

This review examines the current state of healthcare AI applications. Using AI, patterns of substandard care or outbreaks of hospital-acquired illness can be detected with high accuracy and speed for automated patient safety threats. Current research into AI applications promises to make healthcare delivery more unified and human in the future. In this review, we'll look at how AI and machine learning can benefit specific patients. More and more medical organizations are looking into how artificial intelligence can help them improve patient care, reduce costs and become more efficient. In this study, artificial intelligence (AI) has the potential to improve healthcare management, but it also presents a number of obstacles that must be overcome before it can be implemented.

Keywords : AI, machine, healthcare

## INTRODUCTION

Human-made objects are defined as "Artificial" in the context of Artificial Intelligence (AI), whereas "Intelligence" refers to the ability to formulate plans to achieve goals in a highly-informative environment. As a result, Artificial Intelligence (AI) can be defined as nothing more than machine intelligence, with the goal of creating AI through the division of computer science. Artificial Intelligence (AI) has the potential to improve patient care and treatment, as well as provide doctors with all the information they need to make an excellent decision in health care and medicine.

## LITERATURE REVIEW

As suggested by Zupic and Čater (2015), a research stream can be evaluated with bibliometric methods that can introduce objectivity and mitigate researcher bias. For this reason, bibliometric methods are attracting increasing interest among researchers as a reliable and impersonal research analytical approach. Recently, bibliometrics has been an essential method for analysing and predicting research trends. The scientific articles reported show substantial differences in keywords and research topics that have been previously studied. The bibliometric analysis of Huang et al.(2016) describes rehabilitative medicine using virtual

reality technology. According to the authors, the primary goal of rehabilitation is to enhance and restore functional ability and quality of life for patients with physical impairments or disabilities. In recent years, many healthcare disciplines have been privileged to access various technologies that provide tools for both research and clinical intervention. Hao et al. focus on text mining in medical research. As reported, text mining reveals new, previously unknown information by using a computer to automatically extract information from different text resources. Text mining methods can be regarded as an extension of data mining to text data

### OBJECTIVES

Artificial intelligence (AI) and related technologies are increasingly prevalent in business and society, and are beginning to be applied to healthcare. These technologies have the potential to transform many aspects of patient care, as well as administrative processes within provider, payer and pharmaceutical organisations.

There are already a number of research studies suggesting that AI can perform as well as or better than humans at key healthcare tasks, such as diagnosing disease. Today, algorithms are already outperforming radiologists at spotting malignant tumours, and guiding researchers in how to construct cohorts for costly clinical trials. However, for a variety of reasons, we believe that it will be many years before AI replaces humans for broad medical process domains. In this research, we describe both the potential that AI offers to automate aspects of care and some of the barriers to rapid implementation of AI in healthcare.

### RESEARCH METHODOLOGY

To evaluate the objective of the study, Baraut was selected. 80 people from there were selected at random. Primary and secondary data was collected with pretested interview schedules. Percentage analysis was used to study the socio-economic character like age, education and rural income of households.

#### **Research Design:**

Exploratory cum Descriptive study have been adopted.

#### **Sampling:**

Simple Random Sampling has been adopted.

#### **Sample size:**

Baraut: 80

#### **Data Collection Method:**

- Structured questionnaire was designed for collecting data.

- Personal interview is conducted for collecting information.

## CONCLUSION

Artificial intelligence has the potential to revolutionize the healthcare industry, according to this body of work. There are numerous ways in which artificial intelligence (AI) will improve patient outcomes and speed up the process. To better assist surgeons in their work as well as detect diseases like cancer at an early stage, we can use artificial intelligence and machine learning and deep learning. The authors of this paper also point out a few considerations for researchers working on AI. There is a huge potential for cost savings and quality service improvements as a result of the recent advancements in AI research, as well as the support and funding resources provided by governments.

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