

AI IS MAKING AN IMPACT OF ADMINISTRATIVE PROFESSIONALS IN PRIVATE HEALTH CARE SECTOR

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Abstract

The Role of Medicine in Emerging Fields is Essential In this context, technology has already started making its footprint in all fields. Based on that, the medical field is no exception. Therefore AI technology has developed its role in the field of medicine and AI technology has started its work in hospitals all over the world and it is starting to work in many fields of medicine. Especially the day-to-day handling of office procedures is a huge hassle and based on that AI technology saves time and money these are the biggest boons available to the medical field with the above concepts and the researcher aims to study the AI is making an impact of administrative professionals in private health care sector in Madurai district of tamilnadu.

Keywords: AI Technology, Health care sector and administration professionals.

Introduction:

Artificial intelligence (AI) has begun to drastically alter healthcare management in the US in recent years. The AI healthcare market is anticipated to grow from its 2021 valuation of approximately USD 11 billion to USD 187 billion by 2030. This expansion is fueled by developments in artificial intelligence (AI) and machine learning (ML) technologies, which help to enhance workflows, simplify administrative duties, and free up healthcare workers to concentrate more on patient care.

Appointment scheduling and patient record maintenance are only two of the many administrative duties that the healthcare sector has traditionally handled. Despite their importance, these duties demand a significant investment of time and money, which may divert attention from the primary objective of delivering high-quality patient care. The potential for increased operational efficiency is becoming apparent as more healthcare businesses adopt AI technologies. Automation guarantees that administrative procedures are completed more precisely and frees up healthcare workers to spend more time interacting with patients.

The healthcare industry is currently seeing a sharp rise in the use of artificial intelligence (AI), which is revolutionizing industries globally. The term artificial intelligence (AI) in healthcare refers to the application of AI or machine-learning algorithms to collect and comprehend complicated medical and health care data by simulating human cognition. AI accomplishes this through a variety of machine learning

methods, deep learning, robotics, computer vision, and natural language processing. After identifying a pattern in behavior, these algorithms develop their own logic to provide end users with a clearly defined output. Using vast volumes of input data, machine learning aids in the acquisition of significant insights and predictions. Additionally, they teach professionals how to create companions for costly clinical preliminary testing.

Objective of the study

1. To study about AI in health care sector
2. To Analyses the AI impact of administrative professional in health care

Methodology:

Sample design:

Primary data will be collected using simple random sampling method and self-administered questionnaire was used for data collection.

Sources of data:

Both primary and secondary data form the basis of the study. A self-structured questionnaire based on objectives was created to conduct the primary data collection. The secondary data needed for the study was gathered from websites, periodicals, reviews, journals, and other sources.

Sample area and size:

The data was collected only from Madurai district and was collected through questionnaire method from 30 respondents.

Tools for analysis:

- ❖ SEM Model

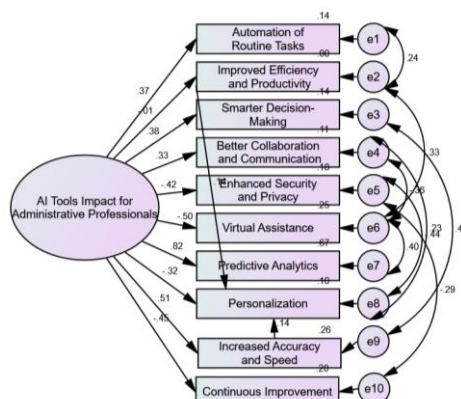
Review of literature

Ahmed Al Kuwaiti et.al., (2023) title of "A Review of the Role of Artificial Intelligence in Healthcare", Applications of artificial intelligence (AI) have revolutionized the medical field. The following important areas are the subject of this study, which is based on a general literature review revealing the function of AI in healthcare: (i) medical diagnostics and imaging; (ii) virtual patient care; (iii) drug discovery and medical research; (iv) patient compliance and engagement; (v) rehabilitation; and (vi) other administrative applications. AI is being used to detect clinical conditions in medical imaging and diagnostic services, control the corona virus disease 2019 (COVID-19) outbreak with early diagnosis, manage electronic health records, improve patient engagement and treatment plan compliance, reduce the administrative burden of healthcare professionals (HCPs), find new medications and vaccines, identify prescription errors, store large amounts of data, and analysis, as well as therapy aided by technology. While incorporating AI into

healthcare, this science pitch addresses a number of technological, ethical, and social issues, such as privacy, safety, the right to choose and try prices, information and consent, access, and efficacy. In addition to increasing HCPs' conviction in improving adoption and boosting important health repercussions, the governance of AI applications is essential for patient safety and accountability. To accurately handle ethical, trust, and regulatory concerns while promoting AI adoption and use, effective governance is a must. The concept of artificial intelligence (AI) has revolutionized healthcare since COVID-19 hit the global health system, and this revolt could be another step ahead to fulfill future healthcare needs.

Omar Ali et.al., (2023) title of “A systematic literature review of artificial intelligence in the healthcare sector: Benefits, challenges, methodologies, and functionalities”, the usage of artificial intelligence (AI) systems is causing a rapid change in the medical and administrative procedures of healthcare organizations. This modification shows how AI has a significant impact on a variety of tasks, especially in early detection and diagnosis-related medical procedures. AI may improve the quality of healthcare services, according to earlier research. According to reports, AI-based technologies make life easier, safer, and more productive for people. A comprehensive analysis of scholarly works on the use of AI in the healthcare industry is presented in this paper. 1,988 scholarly publications from significant scholarly databases were first taken into consideration for the study. Following a thorough evaluation, 180 articles were selected from the list for further examination in order to provide a classification framework based on four dimensions: advantages, difficulties, strategies, and features of AI-enabled healthcare. It was found that AI still performs noticeably better than humans in terms of precision, effectiveness, and promptness when it comes to carrying out administrative and medical procedures. Benefits for patients are closely related to the pertinent AI features in the areas of diagnosis, therapy, consultation, and health monitoring for chronic illness self-management. Value-added healthcare services for medical decision-making, patient data security and privacy, health monitoring features, and innovative AI-powered IT service delivery models are all areas with implications for future research initiatives.

Data analysis and interpretation



MODEL FIT

The degree to which the sample covariance matrix and the model-implied covariance matrix match is determined by the model fit.

Null hypothesis: The hypothesized model has a good fit.

Alternate hypothesis: The hypothesized model does not have a good fit

TABLE 2
Model Fit Summary of Structural Equation Model

Indices	Value
Chi-square value	33.046
DF	25
P value	0.130
Chi-square value/DF	1.322
GFI	0.944
AGFI	0.877
NFI	0.852
CFI	0.955
RMR	0.031
RMSEA	0.057

From the above Table 2, it is found that the calculated P value is 0.130 which is greater than 0.05 which indicates the model has perfectly fit. Here, the Goodness of Fit Index (GFI) value is (0.944) and the Adjusted Goodness of Fit Index (AGFI) value is (0.877). It is greater than 0.9 which represents it is a good fit. The calculated Normed Fit Index (NFI) value is (0.852) and the Comparative Fit Index (CFI) value is (0.955) which indicates that it is a perfect fit also it is found that Root Mean square Residuals (RMR) and Root Mean Square Error of Approximation (RMSEA) value is 0.057 which is less than 0.08 which indicated it is perfectly fit. Hence, the null hypothesis is accepted.

Conclusion

The overall fit indices support the model's good fit to the data. Consequently, the null hypothesis is accepted and there is no compelling reason to reject the suggested model. This suggests that the model is suitable for more research or use and offers a good representation of the facts. In the current era workload is increasing in all sectors and therefore all sectors are starting to choose alternative ways. Moreover, the help of AI Information Technology is essential as technology, a part of which is starting to make its footprint in all fields globally. Thus, the answer of this article is that there is no alternative opinion that the development of the medical field will go upwards by using it.

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