



A STUDY ON AWARENESS AMONG PEOPLE ABOUT RECENT TECHNOLOGY IN HEALTHCARE

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Abstract: Artificial intelligence (AI) developed a model language ChatGPT, which has the ability to play a vital role in public health. ChatGPT could generate the text like a human. Here we are going to know the advantages, disadvantages, limitations and features of ChatGPT in various fields. This technology has been implemented in healthcare by providing contextualized details about the revolutionized patient-centered decisions. The role of ChatGPT in the implementation of a large language model and healthcare delivery advancements for underserved patients are analyzed. It can assist in the development of curriculum, preparation of exams, information of drugs, checking of symptoms, tutoring, in documentation of medical needs. The role of ChatGPT in medical care, some of its possible uses and its implementations are discussed.

I. Introduction

In promoting public health ChatGPT (Generative Pre-trained Transformer) can be used. It provides Information about the health of the public like diseases of infectious, chronic and environmental hazards of health. It is used to answer questions on disease prevention, promotion strategies, in explanation of role of health educators, health workers in community, information on health programs, services of the community, the discuss impact factors of environmental and social community health [1, 2]. Machine learning algorithms are employed by the ChatGPT to make it easy to understand the context; it creates relevant and cohesive responses. The ChatGPT model is a specific application designed for thoughtful providing, conservation, human-like interactions and engaging respectively. It is allowed to use frequently in the applications of virtual assistants, generation of content and translation of language. Additional algorithms or models that improve the outcome are utilized via plug-ins and ChatGPT typically connects to the internet to obtain up-to-date information [3]. For various goals in health care, ChatGPT may be utilized, to provide better solutions for health care. When patient data into ChatGPT, the chatbot will eventually be utilized as a part of the database it can accurately respond to questions analyze various materials and provide the required information to the patients about their problems. Most patients don't know the ChatGPT to know the information about their health condition. Patients may face bewilderment and worry as they adjust to their new diabetic disease. Some patients are using ChatGPT to get information about diseases like diabetes and the required instructions medical information and diet which would help to maintain their health condition [4]. ChatGPT's mission in healthcare is to improve patient outcomes by supplementing the care provided by human healthcare personnel. The transformer model recognizes patterns in the training data and uses this information to draw conclusions. It may be useful in forecasting medical outcomes because the model is skilled at spotting patterns and making predictions based on patient data. Patients who are from rural regions struggle to meet healthcare experts physically in that case these patients may be able to use ChatGPT to get help [5, 6].

II. Research Objective

Transcription of medical records and report generation are healthcare personnel with routine chores assisted by the ChatGPT. By adopting ChatGPT, healthcare workers can save time and focus on more important tasks such as patient care. This system is reliable and transcribes quickly medical records and delivers treatment to the patients. It may translate medical literature from one language to another enabling communication and assisting in the comprehension of critical information among patients and healthcare providers. It is used to investigate the important workflow dimensions of ChatGPT for the healthcare sector to summarize the usual features of ChatGPT for the healthcare domain and to identify significant limits and uses of ChatGPT for healthcare [7, 8].

1.1 Applications

ChatGPT is used to help patients identify their symptoms. It questions patients about their symptoms and recommends the best course of action by functioning as a symptom checker. Because it is used to understand linguistic patterns the technology has the potential to improve human-machine communication. Human experts teach the computer to make decisions that benefit humans by producing believable and ethical solutions. Patients may be educated through ChatGPT about their health and they need to make decisions regarding the treatment, it helps to solve the queries, the information about the drugs, and a rules-based expert system including the diagnosis, therapy, and planning. It provides specialties including radiology, pathology, and ophthalmology, tasks like picture categorizing, and segmentation are employed by this technology. For patient monitoring, physical therapy, and surgeries are done by AI-powered robots. ChatGPT offers medical language and concepts to help with comprehension. It is capable of condensing materials such as clinical notes. It anticipates the correct phrases that will follow a prompt in order to provide a response based on training data. The model generates responses by combining attention approaches with language modeling. The use of ChatGPT in free clinics can address a wide range of issues that free clinics and their patient population. Transport issues, language and interpretation services, adherence to medical screening protocols, provision of discharge summaries and patient information, access to specific healthcare resources and post-clinic scheduling issues are among the problems. Fig.1 shows examples from a student-run free clinic in Columbus, Ohio.

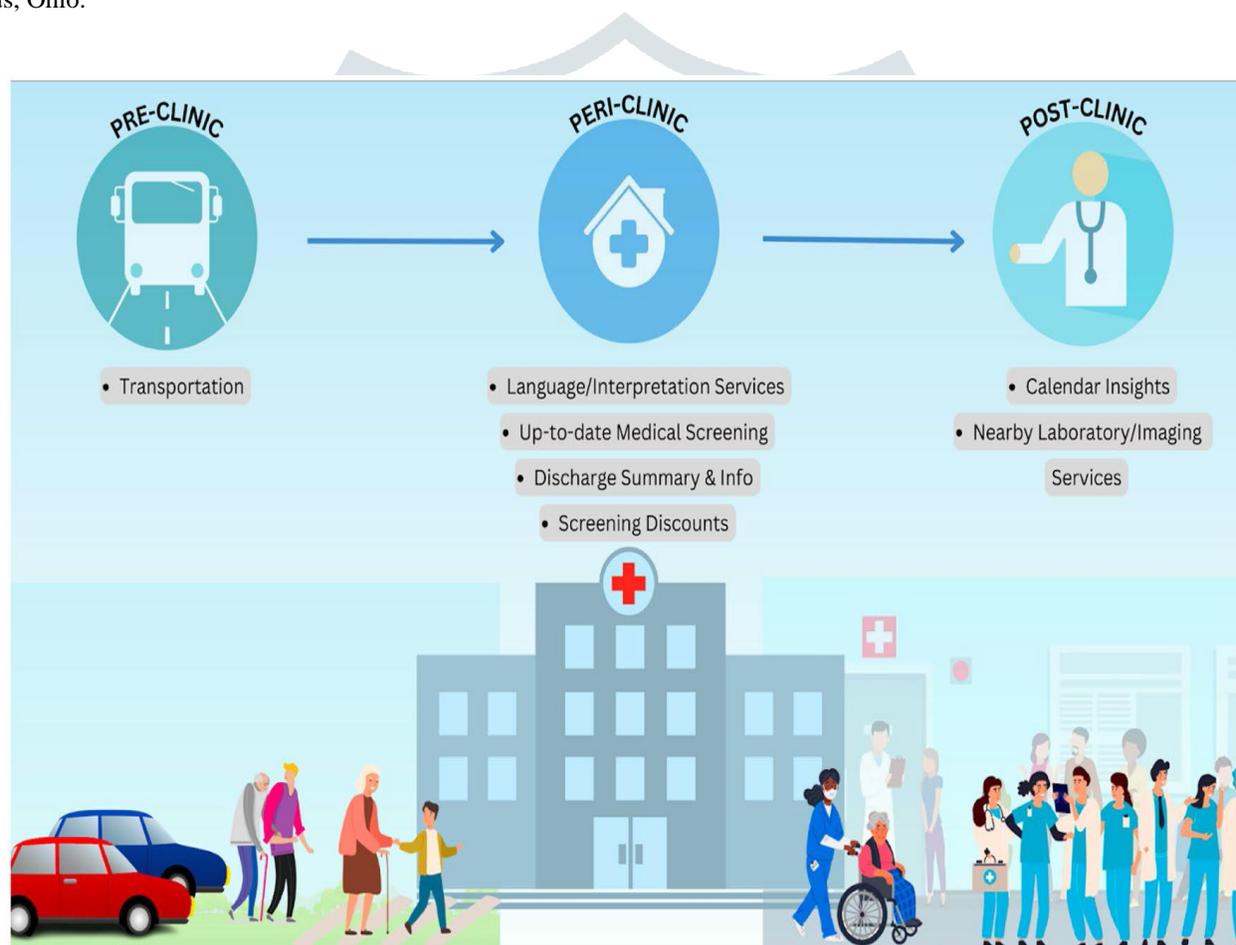


Fig. 1 Chat GPT role in student-run free clinics

1.2 Limitations

One of the most significant restrictions is that the data in ChatGPT is derived from web scraping knowledge databases, social media, and data sources. Many of these are frequently derived from humans and thus have the potential to detect skewed and occasionally prejudiced data. ChatGPT has access creates ethical and privacy difficulties because it has the potential to misuse or illegally access private and sensitive data. It could be used to disseminate incorrect medical information and fake news. It cannot provide personalized guidance to diabetic pupils based on their blood sugar and medication data. This may have a negative impact on the caliber of the developers due to erroneous information being provided. It lacks emotions and emotional support which may be a disadvantage to clients seeking support such as psychological health services.

1.3 Limitations in Training Data and Bias Issues

ChatGPT, like many other AI model has training data restrictions. Both training data restrictions and data bias have a negative impact on the model's output. In reality, when it comes to training minority data groupings this AI technology has proven bias. As a result, it is critical to improve the data transparency of the models in order to eliminate bias in this technology.

2. ChatGPT in Transportation Industry: Improving Safety and Efficiency

The transportation industry is one of the most critical and dynamic industries in the world, with the constant need to improve safety and efficiency. With the initiation of new technologies, such as catboats, machine learning and natural language processing the industry is now able to take advantage of tools that can help achieve these goals. One such technology is ChatGPT, a state-of-the-art language model developed by Open AI. This powerful tool is capable of understanding and responding to human language, making it an ideal solution for the transportation industry. In this article, we will explore how ChatGPT can be used to improve safety and efficiency in the transportation industry, and how it is already being implemented in various industries. From automating customer service to monitoring and analyzing data, ChatGPT has the potential to revolutionize the way the transportation industry operates. Let's dive in and discover how this cutting-edge technology is shaping the future of transportation.

3. Potential future applications and advancements

ChatGPT is a powerful tool that has already begun to be implemented in various industries, including transportation, and its potential future applications and advancements are vast. Here are a few examples of potential future applications and advancements of ChatGPT in the transportation industry:

- Autonomous vehicles: ChatGPT could be used to provide natural language understanding and generation capabilities for autonomous vehicles. This could enable the vehicles to communicate with human drivers and passengers, as well as other vehicles on the road, improving safety and overall driving experience.
- Smart cities: ChatGPT could be used to analyze and interpret data from various sources, such as cameras, sensors, and transportation data, to optimize traffic flow and reduce congestion in smart cities.
- Internet of Things (IOT): ChatGPT could be used to analyze and interpret data from various IOT devices, such as GPS, weather sensors, and cameras, to predict and prevent potential issues that can cause delays or cancellations, which could improve overall transportation operations.
- Natural Language interfaces for transportation management systems: ChatGPT could be used to provide natural language interfaces for transportation management systems, enabling users to interact with the systems using natural language, which could increase the efficiency and ease of use.
- Machine learning-based predictive maintenance: ChatGPT could be fine-tuned to work together with other algorithms and models to provide more advanced predictions, such as anomaly detection and preventative maintenance, which could improve the overall efficiency and safety of transportation systems.

4. Future Prospect

ChatGPT may generate medical reports automatically based on input data such as radiology reports, pathology reports and discharge summaries. Medical research publications can be examined using ChatGPT to identify major ideas and patterns and aid in the search for fresh techniques. ChatGPT can be used to fine-tune data from adverse event reporting in order to identify patterns and trends that can be used to improve patient safety. The dataset can be used to train the ChatGPT model to understand user input naturally and accurately in healthcare. It may include real-time information on weather, local events, and flight status, making it easier for travelers to plan their trips and stay informed. This technology can produce, and comprehend resembling text to human speech, is adaptable in making, and is helpful for so many healthcare needs. It is sure to impress, we use it for the support of customers, production of content, or pleasure. Chat GPT is an effective and beneficial tool for everyone, it can be the future to health care eLearning, text-based information can be created by it and can be helpful in the experiences of individualized learning.

REFERENCES

- [1] Basic, O. Tunis, M. Young, K. Doan, C. Swerdfeger, H. Schonfeld, J. 2020. Artificial intelligence in public health: Challenges and opportunities for public health made possible by advances in natural language processing. *Canada Communicable Disease Report*, 46(6): 161-168.
- [2] Panch, T. Pearson-Stuttard, J. Greaves, F. Atun, R. 2019. Artificial intelligence: opportunities and risks for public health. *The Lancet Digital Health*, 1(1): 13-14.
- [3] Ong, H. Ong, J. Cheng, R. Wang, C. Lin, M. Ong, D. 2023. GPT technology to help address longstanding barriers to care in free medical clinics. *Annals of Biomedical Engineering*, 51: 1906-1909.
- [4] Javaid, M. Haleem, A. Singh, R.P. 2023. Chat GPT for health care services: An emerging stage for an innovative perspective. *Bench Council Transactions on Benchmarks, Standards and Evaluations*, 3(1): 100105.
- [5] Mann, D.L. 2023. Artificial intelligence discusses the role of artificial intelligence in translational medicine: A JACC: Basic to translational science interview with ChatGPT. *Basic to Translational Science*, 8(2): 221-223.
- [6] Iftikhar, L. Iftikhar, M.F. Hanif, M.I. 2023. DocGPT: Impact of ChatGPT-3 on health services as a virtual doctor. *EC Paediatrics*, 12(3): 45-55.
- [7] Gordijn, B. Have, H.T. 2023. ChatGPT: evolution or revolution?. *Medicine, Health Care Philosophy*, 26(1): 1-2.
- [8] Eysenbach, G. 2023. The role of ChatGPT, generative language models, and artificial intelligence in medical education: a conversation with ChatGPT and a call for papers. *JMIR Medical Education*, 9(1): e46885.