

Editorial

DOI: <https://doi.org/10.17981/cesta.04.01.2023.ed>

New technologies in medicine and healthcare: benefits and drawbacks

Advancements in technology have revolutionized the healthcare industry, enabling us to detect, diagnose, and treat medical conditions with greater accuracy and speed than ever before. From electronic health records to telemedicine, these technologies are improving patient outcomes, enhancing communication between healthcare professionals, and reducing healthcare costs.

One of the most exciting technologies in medicine is Artificial Intelligence (AI). AI algorithms can analyze vast amounts of medical data and provide insights into diseases that would be impossible for humans to identify [1]. For example, AI has been used to identify early signs of cardiovascular diseases and to detect breast cancer in mammograms with greater accuracy than human radiologists [2]. However, some experts have expressed concern that AI could replace human doctors, leading to a lack of empathy and a loss of the personal touch in healthcare.

Telemedicine is another technology that is gaining popularity, particularly in rural areas where access to healthcare can be limited. Telemedicine allows doctors to consult with patients remotely, using video conferencing and other technologies to diagnose and treat medical conditions [3]. This can save patients time and money, as well as reduce the burden on healthcare providers. However, telemedicine is not suitable for all medical conditions, and there are concerns about privacy and security when it comes to transmitting sensitive medical information over the internet.

Electronic Health Records (EHRs) are another technology that is transforming healthcare. EHRs enable healthcare providers to access a patient's medical history, medications, and test results quickly and easily. This can improve patient outcomes by reducing errors and providing doctors with a complete picture of a patient's health. However, there are concerns about data privacy and security when it comes to storing sensitive medical information electronically. Some solutions have arrived, as blockchain technologies [4].

In conclusion, technology has the potential to transform healthcare and improve patient outcomes. These technologies offer exciting possibilities for the future of medicine. However, it is important to consider the ethical, privacy, and security implications of these technologies and to ensure that they are used in a way that benefits patients without compromising their rights or safety.

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REFERENCES

- [1] E. J. Topol, “High-performance medicine: the convergence of human and artificial intelligence,” *Nat Med*, vol. 25, no. 1, pp. 44–56, Jan. 2019. <https://doi.org/10.1038/s41591-018-0300-7>
- [2] H. Aguelo & M. O. Sarria, “Detección de cáncer de seno usando imágenes de histopatología y modelos de aprendizaje profundo pre-entrenados,” *Comp Elect Sci: Theory Appl*, vol. 2, no. 2, pp. 27–36, Dec. 2021. <https://doi.org/10.17981/CESTA.02.02.2021.04>
- [3] A. Haleem, M. Javaid, R. P. Singh & R. Suman, “Telemedicine for healthcare: Capabilities, features, barriers, and applications,” *Sensors International*, vol. 2, p. 100117, Jan. 2021. <https://doi.org/10.1016/J.SINTL.2021.100117>
- [4] S. Shi, D. He, L. Li, N. Kumar, M. K. Khan & K.-K. R. Choo, “Applications of blockchain in ensuring the security and privacy of electronic health record systems: A survey,” *Comput Secur*, vol. 97, p. 101966, Oct. 2020. <https://doi.org/10.1016/J.COSE.2020.101966>

