

HEALTH DATA SECURITY: CHALLENGES AND SOLUTIONS IN THE DIGITAL ERA

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Relevance: In the digital era, the healthcare industry has witnessed a significant shift towards the use of electronic health records (EHRs) and digital health technologies. While this transition brings numerous benefits, it also raises concerns about the security and privacy of health data. Safeguarding sensitive patient information is crucial to protect individuals' privacy, prevent data breaches, and maintain trust in the healthcare system. This article explores the challenges faced in health data security and proposes potential solutions in the digital era.

Goal of the work: to strengthen health data security practices and mitigate the risks associated with the digitalization of healthcare systems.

Result analysis – Data breaches and cyberattacks: The increasing digitization of health records has made them attractive targets for cybercriminals. Data breaches and cyberattacks can lead to unauthorized access, theft, or manipulation of patient information. These incidents not only compromise patient privacy but can also have severe consequences, including identity theft, financial fraud, and reputational damage to healthcare organizations. Accidental or intentional data breaches from within the healthcare system can pose significant security risks and undermine patient trust. However, interoperability challenges can arise when sharing data across disparate systems, introducing vulnerabilities and potential security gaps. Adapting to the evolving regulatory landscape and ensuring compliance can be complex and resource-intensive for healthcare organizations. Encryption ensures that even if data is intercepted, it remains unreadable and unusable to unauthorized individuals. Educating staff members about the importance of protecting patient data and recognizing potential security threats can help mitigate risks associated with insider threats. Real-time monitoring, anomaly detection, and incident response capabilities are essential components of an effective security strategy.

Conclusion. health data security is a critical concern in the digital era, given the increasing reliance on electronic health records and digital health technologies. Addressing the challenges associated with data breaches, insider threats, interoperability, and regulatory compliance requires a comprehensive and proactive approach. By implementing strong encryption, access controls, regular assessments, training programs, collaboration, and monitoring systems, healthcare organizations can enhance health data security and protect patient privacy in the digital age.