SECURITY AND PRIVACY OF ELECTRONIC HEALTHCARE RECORDS: CONCEPTS, PARADIGMS AND SOLUTIONS

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Healthcare IT is a growth industry, and the need for guidance in regard to privacy and security is huge. With new federal incentives and penalties tied to the acts, and the implementation of electronic health record (EHR) systems, medical practices and healthcare systems are implementing new software at breakneck speed. Yet privacy and security considerations are often an afterthought putting healthcare organizations at risk of fines, damage to their reputations, serious consequences on patient healthcare, data security and privacy. Various stakeholders are responsible for generating, storing and manipulating the records for the efficient usage and proper care of patients. Access should only be provided to authorized stakeholders as and when required. EHRs consist of various parameters such as clinical notes, patient listings, lab results, imaging results, and screening tests. Any change in the staff (doctors, nurses and care providers) can create problems in the proper access of EHRs pertaining to patients. This keynote speech is the first ever "how to" guide addressing one of the most overlooked practical, methodological, and moral questions in any nations' journeys to maintain privacy and security in the healthcare sector: who can access the information on my EHR? How can I see the information in my record and make sure it's correct? How is it protected from loss, theft and hacking? What should I do if I think my information has been compromised? It differs from other published books as it includes a detailed framework to maintain security and privacy in electronic healthcare records, and comparative case studies with respect to various performance evaluation metrics, such as privacy preservation, scalability, and healthcare legislation.

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