

Publication

It takes a pirate to know one: ethical hackers for healthcare cybersecurity

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Healthcare cybersecurity is increasingly targeted by malicious hackers. This sector has many vulnerabilities and health data is very sensitive and valuable. Consequently, any damage caused by malicious intrusions is particularly alarming. The consequences of these attacks can be enormous and endanger patient care. Amongst the already-implemented cybersecurity measures and the ones that need to be further improved, this paper aims to demonstrate how penetration tests can greatly benefit healthcare cybersecurity. It is already proven that this approach has enforced cybersecurity in other sectors. However, it is not popular in healthcare since many prejudices still surround the hacking practice and there is a lack of education on hackers' categories and their ethics. The present analysis aims to comprehend what hacker ethics is and who ethical hackers are. Currently, hacker ethics has the status of personal ethics; however, to employ penetration testers in healthcare, it is recommended to draft an official code of ethics, comprising principles, standards, expectations, and best practices. Additionally, it is important to distinguish between malicious hackers and ethical hackers. Amongst the latter, penetration testers are only a sub-category. Acknowledging the subtle differences between ethical hackers and penetration testers allows to better understand why and how the latter can offer their services to healthcare facilities.

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