U.S. Healthcare System’s Electronic Health Records Security Threat Avoidance

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Abstract

Security breaches of the U.S. healthcare system’s electronic health records (EHRs) present a critical challenge in healthcare. Current literature indicates that healthcare professionals’ poor cybersecurity behaviors are the leading cause of data breaches in the U.S. healthcare system. Using technology threat avoidance theory, this non-experimental quantitative correlational study aimed to determine to what extent U.S. healthcare professionals’ perceived susceptibility, perceived severity, safeguard effectiveness, safeguard cost, self-efficacy, and threat perceptions of EHRs security breaches influenced their threat avoidance motivations and threat avoidance behaviors while using EHRs. The research findings indicated that perceived severity and perceived susceptibility significantly correlate with a user’s threat perception. The cost of safeguarding measures and the user’s self-efficacy were predictors of healthcare professionals' threat avoidance motivation. Perceived threat and safeguarding effectiveness were not proven to affect avoidance motivation significantly. Avoidance motivation strongly predicted healthcare professionals’ EHRs security breach threat avoidance behavior.

Keywords: Electronic Health Records; Technology Threat Avoidance Theory; Data Breaches, Perceived Threat, Avoidance Motivation

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