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8-10-2023

### State of the Art Research on Healthcare Data Breaches

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#### Recommended Citation

BALAN, SHILPA and Otto, Joseph, "State of the Art Research on Healthcare Data Breaches" (2023).  
*AMCIS 2023 TREOs*. 51.

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# State of the Art Research on Healthcare Data Breaches

*TREO Talk Paper*

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## Abstract

Information security failures and patient data breaches have raised significant concern. According to HIPAA (2023), there has been an increase in data breaches over the past few years, with more data breaches reported in the year 2021. With the volume of electronic health records increasing radically, the risk of medical identity theft is on the rise (Rey, 2011). According to the Ponemon Institute and Verizon data breach investigations report, the health industry experiences more data breaches than any other sector. Cyberattacks are unpredictable and costs of data breaches can be surmounting.

The U.S. Department of Health and Human Services (HHS) classifies data breaches into categories such as theft, loss, unauthorized access/disclosure, improper disposal, hacking/IT incident, and others (Choi et al., 2017). Of the types of breaches, theft continues to dominate as the most likely cause of a breach in healthcare (HIPAA, 2023). Hackers are increasingly targeting email and network servers to gain access to sensitive health data. In the healthcare sector, compromised health records such as social security numbers are profitable to criminals. Further, health insurance policies can be stolen to file fraudulent claims (Keckley et al., 2011).

Health data breaches have significant consequences for patients, providers, and payers. As more cyberattacks emerge, health organizations are identifying measures to mitigate their risk in the case of a breach. One of the key goals of information security is ensuring data integrity. Regulations, such as HIPAA, have been asserted to assure patients' privacy and maintain security. In this study, we examine the state of security research and breaches in healthcare.

## References

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