

Health Information Compliance Alert

Is Blockchain the Answer to Healthcare's Cyber War?

This new time-stamping technology may be the next big thing in HIT.

Stronger compliance protocols, trained security staff, managed antivirus software, cloud computing, and more have all been considered the opus to overcome cyber attacks. But now, experts suggest another cutting-edge technology might be just what HIT needs to eradicate hackers.

Definition: "A Blockchain is a data structure that can be timed-stamped and signed using a private key to prevent tampering," notes the Office of the National Coordinator for Health Information Technology (ONC) on its website. "There are generally three types of Blockchain: public, private and consortium."

Last year, the ONC put out a blockchain challenge to promote avenues for harnessing the new technology and adapting it to healthcare's needs. Several white papers on the subject were submitted and grants for research on the subject were awarded.

The ONC website devoted to the blockchain challenge gives these specifics on its "potential uses are:"

- "Digitally sign information,
- Computable enforcement of policies and contracts (smart contracts),
- Management of Internet of Things (IoT) devices,
- Distributed encrypted storage, and
- Distributed trust."

Expert insight: "Blockchain is an encouraging technology, which will overall improve the security posture of the industry," says **Kurt J. Long**, founder and CEO of FairWarning, Inc in Clearwater, Florida. "The benefits range from its immutability and transparency to increased level of data security."

Long reminds interested HIT workers that it's in the beginning stages of impacting healthcare. "Blockchain is many years away from having a tactical impact," Long adds. "There are many challenges and obstacles that need to be addressed including regulation, industry adoption, and complex security concerns."

Note: Though blockchain may not be ready to address healthcare's issues with ransomware just yet, it may in the future. Health Information Compliance Alert will continue to monitor this emerging technology and its influence on health IT.

Resource: For a closer look at blockchain technologies and the challenge results, visit <https://www.healthit.gov/newsroom/blockchain-challenge>.