

AI-driven Security for the Healthcare Industry

AI-driven Data Security (U.S. patents 7,937,579, 8,261,058, 8,543,806, 8,826,448)

The likelihood of a firm having a data breach in the next two years is 27.9% (source: Ponemon Institute). Citrix (a firm that manages the data for 400,000 companies) was breached, so security expertise is no guarantee that data is safe. Laws like HIPAA, COPAA and the EU GDPR make medical data protection imperative, and this will become even more critical with new laws like Sen. Elizabeth Warren's proposal making company executives criminally responsible for data breaches.

VaultChain is a new type of security that uses AI to secure medical data. Some of its features include:

- Security that has been proven by financial institutions for more than ten years
- Sensitive data that automatically notifies the company when at risk
- Rather than degrade, data security actually gets stronger over time
- Data can be controlled in unknown locations after it is stolen
- Information about would-be data thieves can be sent to management
- Compliance upgrades are done with little or no program changes
- Usage stats enable new revenue models for monitoring services

AI-driven Medical Device Protection (U.S. patent 8,613,107)

The inventor's wife worked at St. Jude Medical, so he is familiar with the dangers of poor device design, testing and protection. FDA's warning about implantable heart defibrillators security flaws manufactured by Medtronic show how IoT devices in general and medical devices in particular are at great risk.

VaultChain's AI-driven data security has been enhanced to protect medical devices, with additional features that include:

- Tamper-proof security that does not increase the device cost
- Security for simple 1¢ RFID tags up to the most complex medical devices
- Field-upgradeable protection without the need to bother patients
- Real-time alerts when hacking attempts are detected

AI-driven Medical Supply Chain Protection (U.S. patents 7,941,376, 8,359,271)

Counterfeit drugs are a major problem that costs the industry and estimated \$300 billion each year, and kills an estimated 700,000 Africans each year (source: World Health Organization).

VaultChain's data protection has been further enhanced to protect physical items, and Amazon's new 'Project Zero' validates (and may infringe) this new protection. Our additional features that include:

- Removing the economic benefit of counterfeiting
- Warnings for counterfeit, grey market, expired, and recalled items
- Protecting items *after* they have left the supply chain
- Connecting the end consumer directly with the manufacturer

Kloke is a technology firm specializing in development of AI-driven data security and privacy solutions.

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