

## Health sector gives blockchain glowing prognosis

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Proponents say blockchain could revolutionise data analysis and improve responses to health crises such as four laboratory-confirmed Ebola cases in the United States in 2014

Securing safe interchange of patient data, improving the conduct of



clinical tests and medicine traceability, and lowering costs.

These are just some of the potential boosts for global healthcare the widespread use of blockchain technology, still in its relative infancy, could bring to the table, the sector hopes.

The myriad potential applications of the cutting-edge technology used by cryptocurrencies led by bitcoin are countless—and gradually making their presence felt, albeit for now in small, disparate doses.

The blockchain uses chunks of data via distributed ledger technology, permitting the secure, immutable and transparent sharing of almost any form of information.

The concept led Forbes magazine recently to observe that "it seems that blockchain is about to have an impact on nearly every industry".

The technology has steadily been creeping into sectors from finance and cybersecurity to logistics, from agro-business to energy via air transport.

In the <u>health</u> sector, a number of trial projects are already sifting data, the goal being to guarantee security of medical systems and manage patients' digital dossiers.

"Blockchain is already being used in pilots for health data analytics, medical device security and electronic patient records,"French pharma giant Sanofi said in a recent note.

"Beyond that is the potential to apply the technology to everything, from more efficient clinical trials and speedier approvals of new therapies to reducing counterfeiting and increasing transparency about cost."

## **Respect right to be forgotten**



In the United States, IBM Watson Health has been working with US food safety body the Food and Drug Administration to come up with a blockchain-based, seamless and secure health data exchange system.

IBM Watson Health is also teaming with US Centers for Disease Control and Prevention (CDCs) to determine how blockchain can facilitate secure <u>data exchange</u>.

The idea is to use a blockchain platform to revolutionise data analysis through cognitive computing and improve epidemiological responses to health crises such as that of 2014, when CDCs earned some criticism over their response to four laboratory-confirmed Ebola cases in the United States.

Currently, says IBM, "around 80 percent of health data is invisible to current systems because it's unstructured."

In Europe, the MyHealthMyData uses a blockchain model compatible with tough new EU privacy laws that came into effect last month on online personal data protection.

"We only stock in the blockchain links to information, and not the information itself," MyHealthMyData coordinator David Manset told AFP.

MyHealthMyData, helped with 3.5 million euros (\$3.8 million) of EU finance and whose partners include Germany's Siemens, prioritises ease of access to <u>health data</u> and the ease of sharing clinical trials data where administrative tasks currently eat up around "80 percent of researchers' time," according to Manset.

Yet a balance has to be struck between people's right to have their data disposed of—the "right to be forgotten" in terms of wiping their digital



information trace—set against blockchain's key selling points of immutability and unlocking efficiency advantages.

Some US estimates put the potential gains not least from cutting administrative and operational waste at hundreds of billions of dollars in a market where global expenditures surpassed \$3 trillion in 2017 and will hit a projected \$8.7 trillion by 2020, according to Deloitte.

MyHealthMyData suggests if somebody wishes definitively to erase his or her data from the trove then the links to that information could be rendered unusable rather than cause an actual break in the chain.

## All cherry; no cake?

Manset explains that "we see blockchain as underpinning third party trust."

But Anca Petre, co-founder of 23 Consulting, specialising in blockchain health sector potential, thinks large scale industry adoption will take time considering the sensitive nature of the data.

"For that we would have to have 100 percent digitised data and software inter-operability" for all parties, which is very far from being the case today, Petre told AFP.

"The first issue is to get everybody on board" which "will take time," concedes Luca Comparini, in charge of <u>blockchain</u> at IBM France.

Petre is blunter.

"Blockchain is the cherry on the cake. But first you need the cake," she told AFP on this sidelines of the recent Vivatech salon in Paris.



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