Allowing clinics to keep history regarding patient health and claims on the blockchain

Alexander Zhovnuvaty
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About myself

- 15+ years of experience in IT industry (QA expertise/Management/Automation)
- 7+ years of experience in startups – 4 projects in total (Co-Founder/CTO)
- 1 year of experience in blockchain (Hyperledger Sawtooth/Python)
Overview what was done before

- By functionality: covered the following use case on blockchain

  *come to clinic* -> *register claim* -> *assign doctor* -> *first doctor visit* -> *eat pills/attend procedures/pass tests* -> *next visit*

- By component: added smart contract, command line client, unit tests
Why blockchain?

• Immutability - no participant can modify a transaction after it has been recorded on the ledger.

• Transparency - allows each participant to trust the network

• Finality - only one source of *truth*. There is only one ledger for the whole network
Applicable cases

- Cost calculation between clinic and third-party service providers;
- Ambulance checks recent health status of user on an accident
- Insurance company validates recent health status of new client when signing a contract with him
- Human factor made by doctor
- Doctor's rating review before visit (like reviews in Google Maps)
- Overhead expenses of what is left in clinic's repository
- Patient served by multiple clinics having certain data shared between them
- ?
Current progress

- Project approved and added to The Linux Foundation Hyperledger Labs ([https://github.com/hyperledger-labs/sawtooth-healthcare](https://github.com/hyperledger-labs/sawtooth-healthcare))
- Added REST-API component (extra logic can be added to backend in next releases)
- Web client (user can interact with the dApp in browser)
- All infrastructure fully isolated in Docker component
Potential competitors

Ciox Health
Alpharetta, Ga
As the biggest manager of medical records in the U.S. (its software is used to securely transfer records between healthcare providers), Ciox figures the blockchain could cut paperwork redundancies, reduce medical mistakes and provide it a new source of subscription income. It has established a team to evaluate which blockchain platform to build on. Full profile

CVS Health
Woonsocket, RI
New CVS subsidiary Aetna is a member of IBM’s Health Utility Network, a group (including Cigna and Anthem) working to create a distributed ledger of information available to patients, providers and insurers. As its first project, the network plans to publish tamperproof, unforgeable medical credentials so patients can check out their doctors. Other projects being considered would combine data from different insurers to make it easier to share information between doctors and insurers and prevent prescriptions that conflict, with the aim of improving care while cutting costs. Full profile
Opened issues

- Advisor
- Team
- First users/Organization
- Investments/Grants
Q&A

Contact: a.zhovnuvaty@gmail.com
https://www.linkedin.com/in/alexander-zhovnuvaty-88004026/