



medicalchain

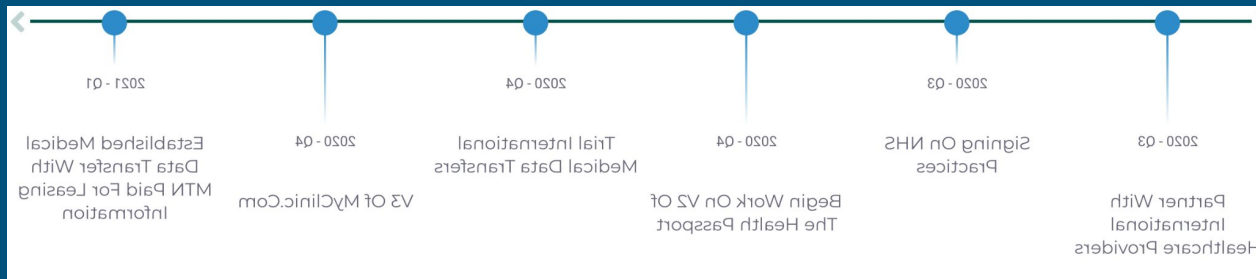
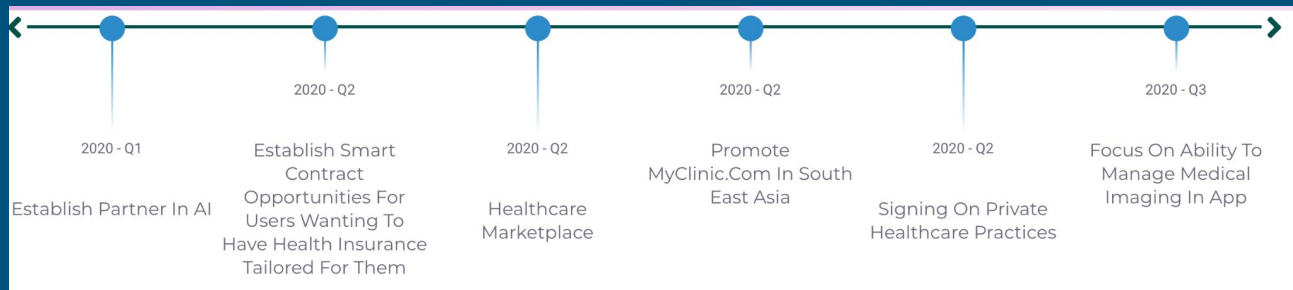




Own Your Health



Roadmap



structure

Medicalchain is built using a dual blockchain structure. The first blockchain controls access to health records and is built using Hyperledger Fabric. The second blockchain is powered by an ERC20 token on Ethereum and underlies all the applications and services for our platform.

Patient Granting Access

- Patient A grants access to EHR to Practitioner A
- Practitioner A's ID is added to Patient A's authorised asset on the ledger
- Patient A's ID is added to Practitioner A's authorised asset on the ledger
- The Symmetric key for the EHR is decrypted with Patient A's private key
- Symmetric key is then encrypted with Practitioner A's public key

Patient Revoking Access

- Patient A revokes access from Practitioner A
- Practitioner A's ID is removed from Patient A's authorised asset
- Patient A's ID is removed from Practitioner A's authorised asset
- Patient A's private key is used to decrypt Symmetric key for EHR which is used to decrypt the EHR
- The EHR is encrypted with a new Symmetric key
- The new Symmetric key is encrypted with Patient A's public key and the public keys of all the remaining IDs that have permission

Practitioner Referring Patient

- Practitioner A updates the permissions to allow Practitioner B to access the Patient's EHR.
- Chaincode will check that Practitioner A has permission on the EHR.
- Practitioner A uses its private key to decrypt the EHR's symmetric key
- Practitioner B's public key is used to encrypt the Symmetric key
- Practitioner B's ID is added to Patient A's authorised asset
- Patient A's ID is added to Practitioner B's authorised asset