











# Trust My Identity



solving Track 1 – Identity Management and APIs
while dabbling in Track 3 – Data Aggregation and Linkage
brought to you by Team TMI













team



## inaccurate information

Payer have non-standard provider data structures-Legacy systems store data in multiple disconnected databases



# limited sharing

Multiple versions of data Need based siloed data

## cumbersome processes

Latency in updates Complex and dynamic data









### What did we use?

- IPFS
- Monax Blockchain (Ethereum + Tendermint)
- BigChain DB (BFT + NoSQL DB)

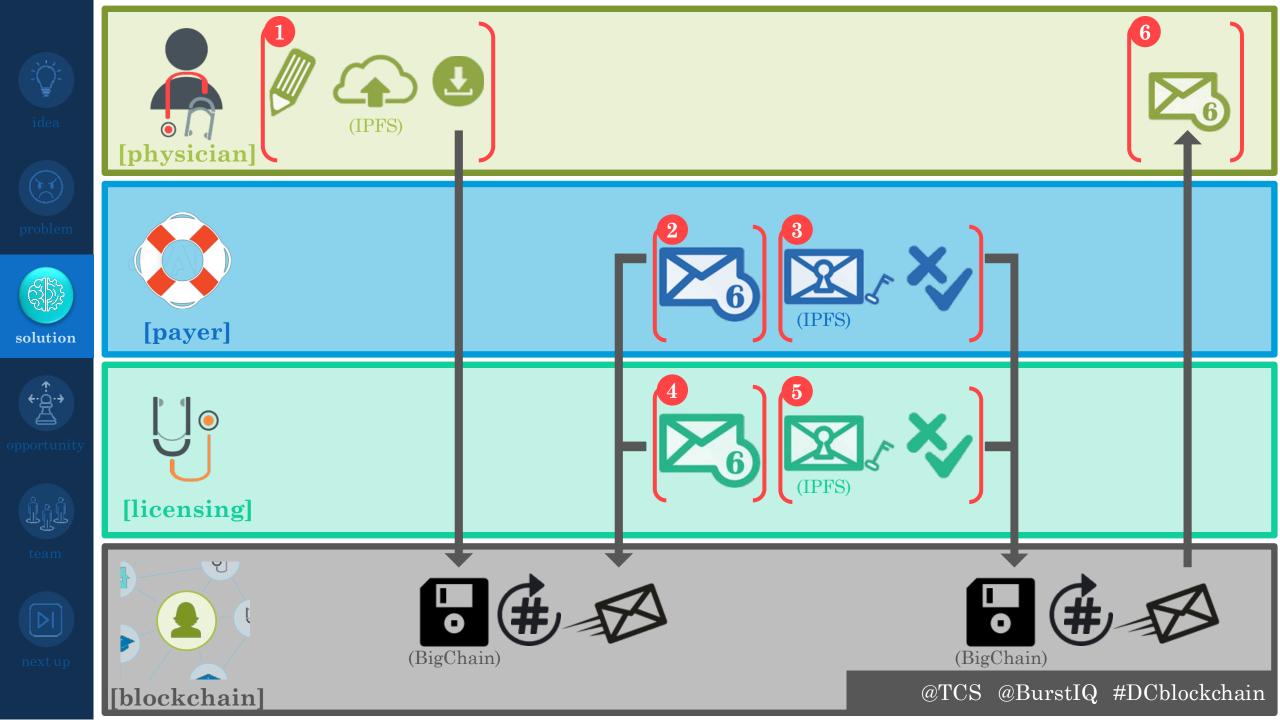
### How do we manage identity?

- Manage attestation by running a smart contract system based on DOUG
- Enforce digital signatures for persistent Primary Source Verification

### How do we link data?

- Consensus-controlled authority
- Linked payloads in BigChain DB
- Split data from the blockchain with pointers

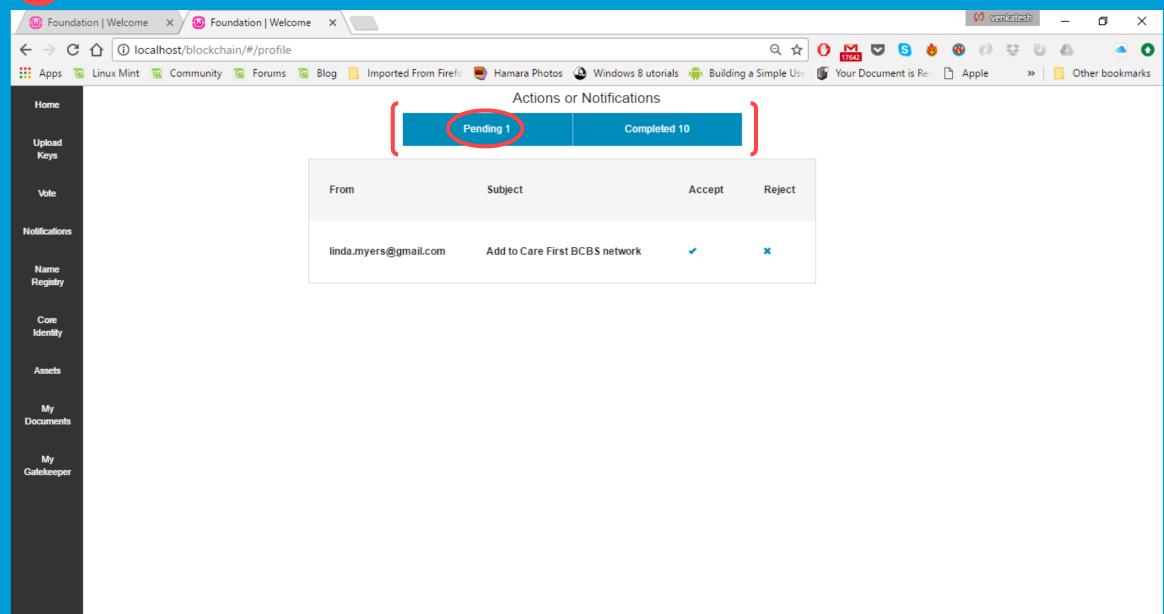
@TCS @BurstIQ #DCblockchain



#### Physician creates a profile (!) venkatesh ₽ C ↑ localhost/blockchain/#/register Apps 🔟 Linux Mint 🔟 Community 🔟 Forums 🔟 Blog 📙 Imported From Firefo 🌉 Hamara Photos 🚇 Windows 8 utorials 📫 Building a Simple Use 🕡 Your Document is Rea 🖰 Apple » Other bookmarks Register to the Blockchain Ledger Home Upload Primary Speciality Keys Linda.Myers@gmail.com Anesthesiology NPI Secondary Speciality Vote 999001234 Notifications LastName Tertiary Speciality Myers Name Registry FirstName Phone Number solution Linda (855)-234-1234 Core Identity 5255 Loughboro Road N W, Washington DC 20016 Assets Credentialing Affiliation Network My Documents Network Name Credenntial Type Credenntial Entity Afilitation Entity My Carefirst BCBS Board Certification The American Bo Gatekeeper Network Name Credential Type Credenntial Entity Afilitation Entity Network Name Credential Type Credenntial Entity Afilitation Entity Add More.. Add More.. Add More..

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### 2 Payer receives a <u>trigger</u> to verify network affiliation















### Payer certifies network affiliation 🔑 venkatesh C ↑ i localhost/blockchain/#/profile Apps 🐚 Linux Mint 🐚 Community 🐚 Forums 🐚 Blog 📙 Imported From Firefo 🌉 Hamara Photos 🚇 Windows 8 utorials 📫 Building a Simple Use » Other bookmarks Actions or Notifications Home Pending 0 Completed 11 Upload Keys Vote Subject From Accept Reject Notifications Name Registry solution Core Identity Assets My Documents My Gatekeeper

### Board receives a trigger to verify clinical specialty 🔑 venkatesh × Apps 🐚 Linux Mint 🐚 Community 🐚 Forums 🐚 Blog 📙 Imported From Firefo 🌑 Hamara Photos 🔕 Windows 8 utorials 📫 Building a Simple Use 🥡 Your Document is Rea » Other bookmarks Actions or Notifications Home Completed 5 Pending 1 Upload Keys From Subject Accept Reject Vote Notifications Board certification from The Name linda.myers@gmail.com American Board of Registry solution Anesthesiology Core Identity Assets Му **Documents** My Gatekeeper

### Board rejects clinical specialty 🔑 venkatesh $\times$ C ☆ i localhost/blockchain/#/profile Apps 🐚 Linux Mint 🐚 Community 🐚 Forums 🐚 Blog 📙 Imported From Firefo 👅 Hamara Photos 🔕 Windows 8 utorials 📫 Building a Simple Use » Other bookmarks Actions or Notifications Home Pending 0 Completed 6 Upload Keys Vote Subject From Accept Reject Notifications Name Registry solution Core Identity Assets Му Documents My Gatekeeper

#### Physician profile is update + Physician is notified of <u>attestations</u> (!) venkatesh $\times$ Apps 🔟 Linux Mint 🐚 Community 🐚 Forums 🐚 Blog 📙 Imported From Firefo 🕑 Hamara Photos 🚱 Windows 8 utorials 📫 Building a Simple Use Your Document is Rea » Other bookmarks Register to the Blockchain Ledger Home Upload Primary Speciality Email Keys Linda.Myers@gmail.com Anesthesiology NPI Secondary Speciality Vote 999001234 Notifications LastName Tertiary Speciality Myers Name Registry FirstName Phone Number solution Linda (855)-234-1234 Core Identity 5255 Loughboro Road N W, Washington DC 20016 Assets Network Credentialing Affiliation Му **Documents** Afilitation Entity Network Name Credenntial Entity My Carefirst BCBS Board Certification The American B Gatekeeper Network Name Credential Type Credenntial Entity Afilitation Entity Network Name Credential Type Credenntial Entity Afilitation Entity Add More... Add More.. Add More..

















Accurate provider information

Faster credential verification

Patient-centered care options

Asynchronous + real-time updates by

Interoperability at scale, on steroids













Distributed Describes Discostored deinos
Distributed Provider Directory drives
Distributed 110 vider Birectory arrives

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multiple entities

Transition	to value-based	payment
models		



















































Uppi Reddy



Andreas Freund



Venky Raghunathan



Shane Giehll



Lily Bragg



### TATA CONSULTANCY SERVICES













tear





Include blockchain as a recommended tech in the design + implementation of distributed provider directories



Encourage recipients of CMS funding to invest in developing distributed provider directories



Provide education on use cases + advantages of blockchain













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