Automation in Public Health Decision Making

What is blockchain and how can it help?

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What is blockchain?

Source: CDC
Private vs. Public Distributed Ledger Technology (DLT)
DNA of Public DLT

It’s a matter of trust.
Ok…start with trust. Anything else?

- Public vs. Private (is this just a shared ledger?)
- Network Nodes
- Tokens
- Protocols
- Consensus (mining complexity)
- Scaling
- Smart Contracts
- Key Management
- On-Chain vs. Off-Chain
- Partial Ownership, …

But #becraeful!

- Garbage in, tamper-proof garbage forever
- Mapping real-world to digital
- Identifying things & people
- Scaling governance
- Legacy (i.e. all) data
Trough of Disillusionment

Source: Gartner

Public Health and Life Science use cases

- Emergency Response
- Aid Management
- Cash Management in Crisis Relief
- Public Health Data Surveillance
- Dangerous Substance Tracking
- Death Certificate Exchange
- Opioid Tracking
- Population Health Management
- Public Health Communication
- Inventory Tracking
- Inter-agency data exchange
- Counterfeit Drug Tracking
- Clinical Research Collaboration

*Generic Drug Shortage*
Generic drug supply shortage POC

Generic drug supply shortage demo
Could’ve said this at the beginning!

**Blockchain is relevant for public health & life sciences**

Think *public blockchain* long-term for many use cases
- Private to public (permissioned to permissionless)
- Think off-chain (what’s real-world, where’s the data)
- Think tokens to attribute value creation

Easiest use cases to address are *internal supply chain*

[FIRST] Compliance & transparency = improvement
[LATER] Automation & disintermediation = transformation

Separate **noise from signal**
- Scaling, interoperability, protocols, performance, ease of use... all evolving at record pace. Don’t get hung up here
- Focus on prioritization and continued experimentation

Invest in the **right people**
- Start with right culture, open technologies, DevOps

*Questions?*
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“When you put it like that, it makes complete sense.”