Analysis & development of Blockchain Solutions
DISTRIBUTED LEDGER TECHNOLOGY AND HEALTHCARE

REAL WORLD USE-CASE OR HYPE?
“Putting your medical records on a blockchain is a terrible idea”.

...No characteristic (censorship resistance, trust, transparency, decentralisation) of blockchain that could be of advantage.

...central databases are far more effective.
HEALTHCARE SYSTEMS SINCE TODAY
A TALE OF TWO CITIES

1. Modern, rapidly advancing

2. But basic care failure. At worst Mid-Staffordshire Enquiry UK...care, data and transparency failure... but everyday practice too, 17 year lag

Can never solve 1 without 2
LET’S LOOK AT BASIC CARE

• Know what the ‘Standard’ is.

• Real-time patient data to all interconnected players in the health ‘ecosystem’.

• Track care and patient parameters dynamically – things change everyday.
EXAMPLE PATIENT

• Cancer patient

• Multi Disciplinary Team inputs

• Complex care

• Regional Centres – but distributed patients
PATIENT CENTRED CARE?
SYSTEM CENTRED CARE - MANY MOVING PARTS, MANY PIPES, HARD TO NEGOTIATE OR SYNCHRONISE – FOR EVERYONE
THE ANSWER – CENTRALISED DATABASES
‘CENTRALISED’ DATABASES ARE FAST BUT DON’T GIVE SYSTEM WIDE ACCESS (IN PRACTICE)

NHS ‘Connecting for Health Project 13B GBP cost

Limited outcomes

Patient Experience better? Outcomes better?
21st Century
Control the Database = Control the Market
PUBLIC VS PERMISSIONED SOLUTIONS

Permissionless Blockchain

Permissioned Blockchain
BLOCKCHAINS CHANGE ‘OWNERSHIP OF DATA’ – INCENTIVISE ‘CO-OPERTITION’
THREE STAGES OF ECOSYSTEM THINKING’

1. Access to Records – Distributed Interoperability (Permissioned)

2. Patient Control of Data – Decentralised Private Key (Public)

3. Transparent Outcomes – Immutable Data Integrity & Traceability.
IN SUMMARY

Blockchain has a place in healthcare because it solves a significant generalised problem.

It provides the ‘rails’ for real-time access to a current clinical picture across multiple parties in a complex ‘ecosystem’ of care.

The ‘Antonopoulos thesis’ is wrong.