



Collaborative innovation in health data science

Kevin Ross, CEO



To be a world class, data-driven health system, Aotearoa needs



COVID-19 Risk Score for Call Prioritisation

- Identify those most at risk of hospitalisation
- From reliable, national data
- Available at the time of a positive COVID-19 test
- In order to reach the most vulnerable first





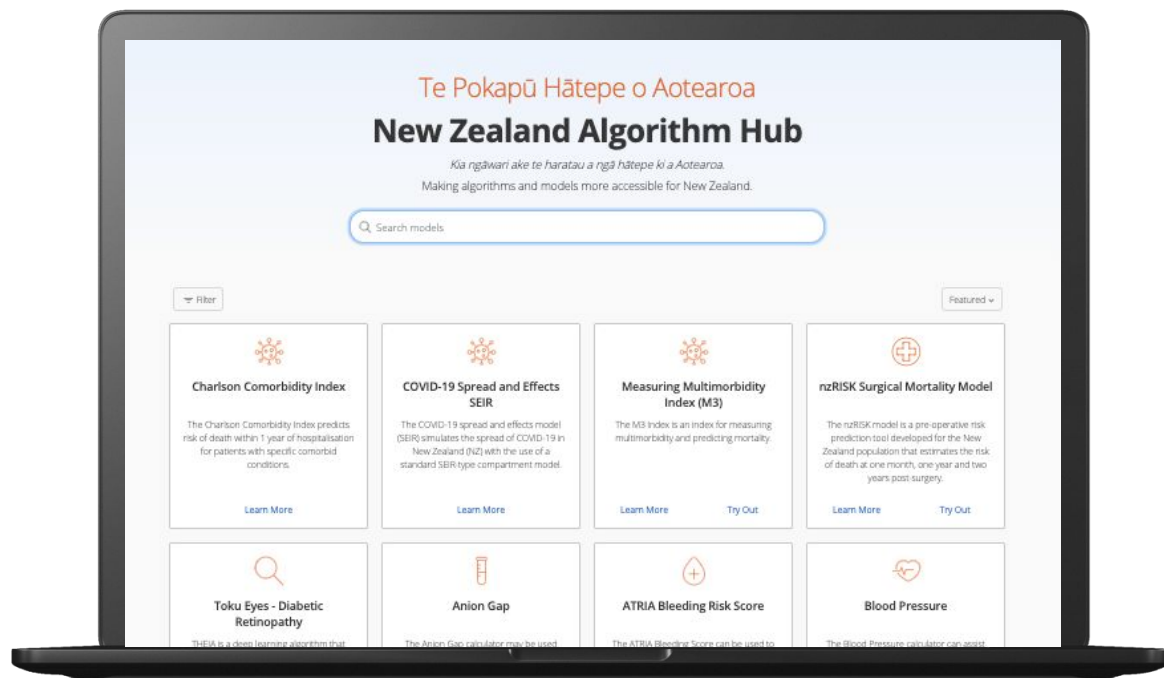
Whānau like us

In the Whānau Ora model of care, priority outcomes are selected by whānau based on their own perception of need.

- Identifying the services that are most likely to be effective based on what we know about each circumstance
- Enrich the picture with the experience of community
- Build on wider PDH capability to understand “people like this”

New Zealand Algorithm Hub

- Knowledgebase of validated content
- Three deployment channels
- Model lifecycle management
- Governance framework
- Stable, automated and scalable system



AI for skin cancer diagnosis

Molemap / Kahu.ai have are launching a new service

- Triaging at GP practice
- Developing new camera prototype
- Equitable access to dermatologist capability



Smart Coding

Father died of **MI** at age 69.

Patient had some symptoms concerning for a **heart attack**.

Thus the patient ruled out for **myocardial infarction**.

He continued to recover from his **cardiac infarction**.



Identified concept:
Myocardial infarction
22298006

Parents

- > Ischemic heart disease (disorder)
- > Myocardial disease (disorder)
- > Myocardial necrosis (finding)
- > Necrosis of anatomical site (disorder)

Myocardial infarction (disorder)

SCTID: 22298006

22298006 | Myocardial infarction (disorder)

en Heart attack
en Myocardial infarction
en MI - myocardial infarction
en Myocardial infarction (disorder)
en Cardiac infarction
en Infarction of heart
en Myocardial infarct

Associated morphology -> Infarct
Finding site -> Myocardium structure

Children (14)

- > Acute myocardial infarction (disorder)
- = First myocardial infarction (disorder)
- = Microinfarct of heart (disorder)

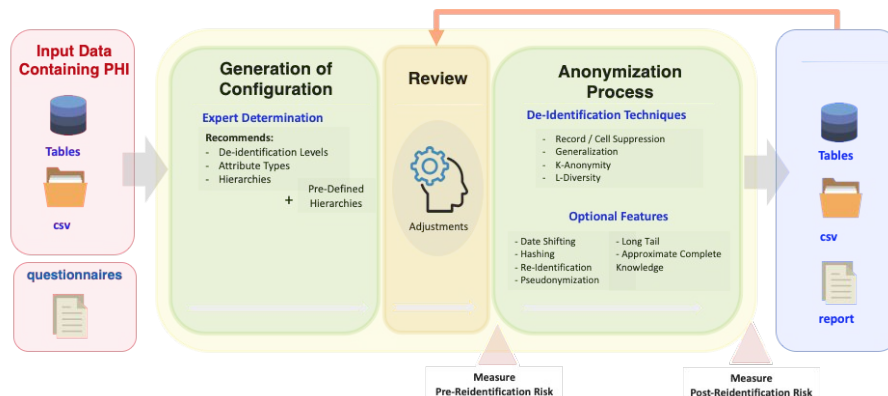
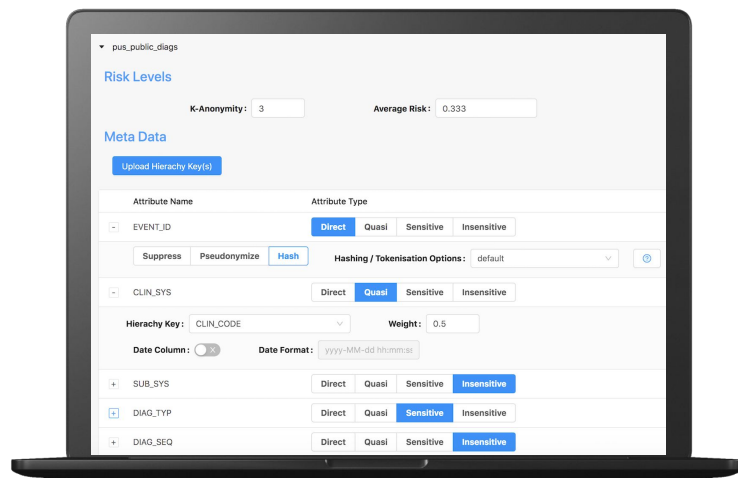
Telehealth for all kiwis

- Starting with the more challenging
- Co-design protocols
- Build into technology gaps
- Provide education



De-identifier

Enables health data sharing via a consistent, compliant and traceable end to end process for research, development and testing, and analytics.



Comparable international organisations



OPTION 1

A health data innovation accelerator focused on industry opportunities

OPTION 2

The continued evolution of PDH's current model, with it becoming the health data innovation hub of a national health innovation ecosystem

OPTION 3

A health data innovation accelerator focused on the health system

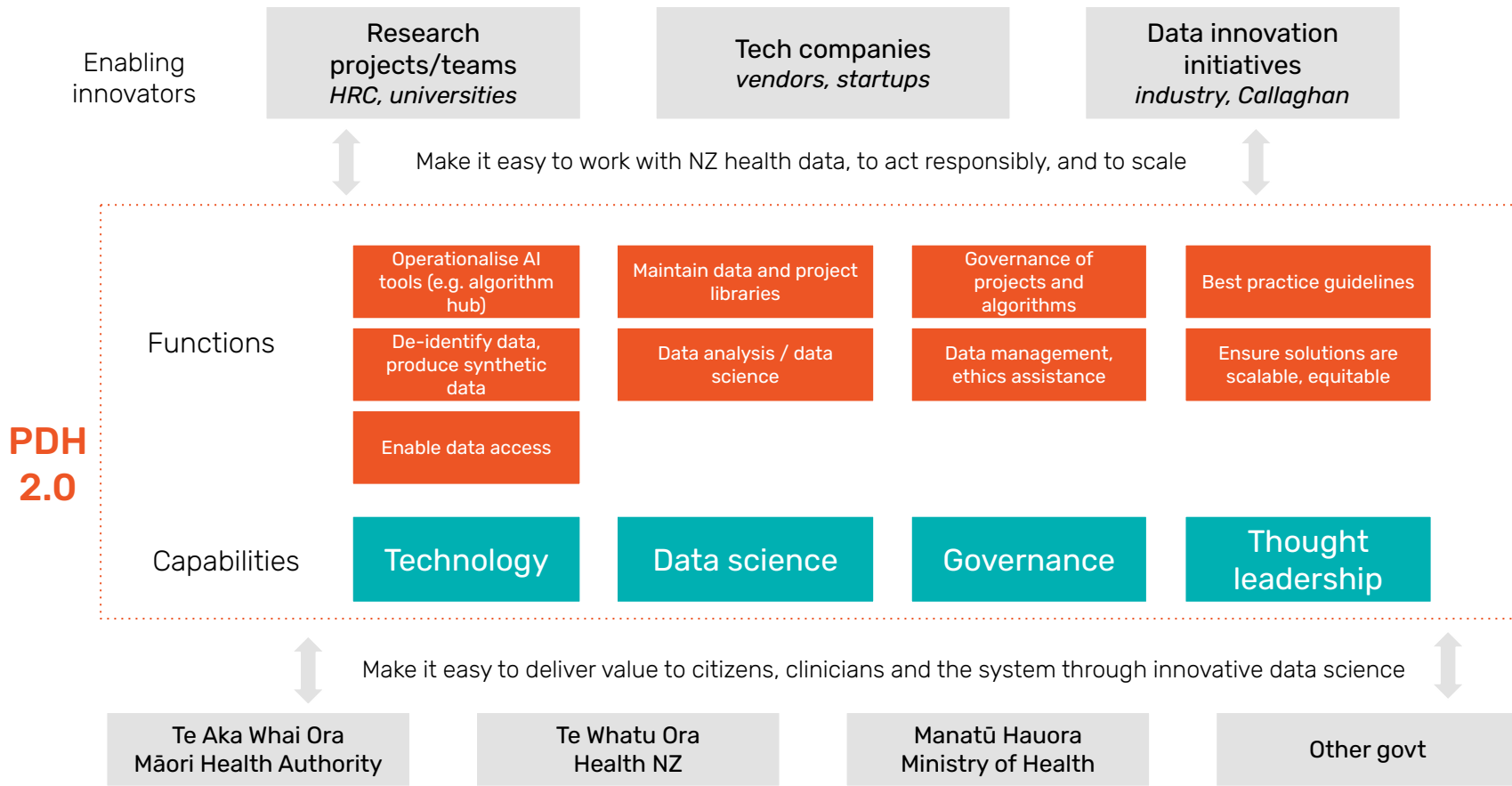
OPTION 4

A public health data innovation entity

Closer to the private sector

Closer to the public sector

PDH: Unlocking the value in NZ's health data



Never a better time to work in health data science



