



Clinical Data Analytics Platform (CDAP)

James McGree

in collaboration with Bellgard, Zeps, Snelling, Nicholson, McNeil, Bolevich, Wong and others



THE UNIVERSITY OF
SYDNEY



MONASH
University



Health



Queensland
Government



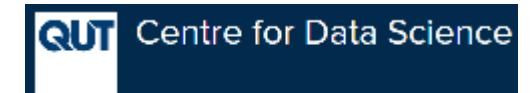
Australian Government
Department of Health

COVID-19

CLINICAL DATA
ANALYTICS
PLATFORM



digital health
CRC



The pandemic imperative

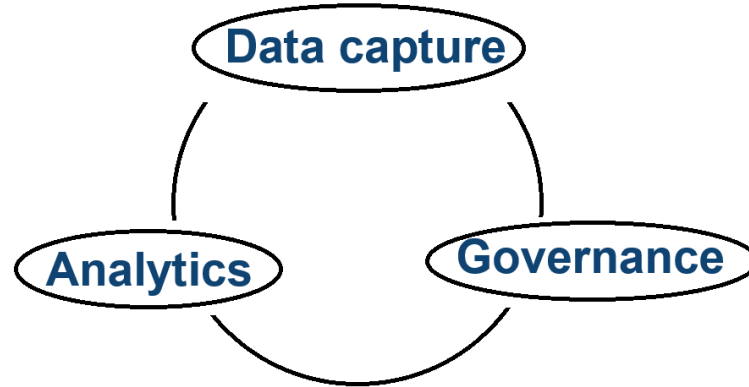
- COVID-19 highlighted the need for rapid access/utilisation of health data to inform patient care
- With little known about the disease, patients have been treated in an information void
- Clinicians have not, at a national level, had access to:
 - Diagnostic, treatment and outcome data
 - Analytics to predict prognosis and likely outcomes of interventions
 - Infrastructure to enable rapid evaluation of treatments for COVID-19 patients
 - Capture and aggregate long term follow up data
- Unfortunately, the pandemic has shown that no digital health solution is currently available to provide this

Clinical Data and Analytics Platform (CDAP)

- \$4 million Digital Health CRC project involving health services, clinicians and researchers
- QUT led with University of Sydney and Monash
- Partnering and deploying in QLD and NSW Health
- Foundations of CDAP



Matt Bellgard, Director of eResearch, QUT



James McGree
A/Prof of Statistics,
QUT

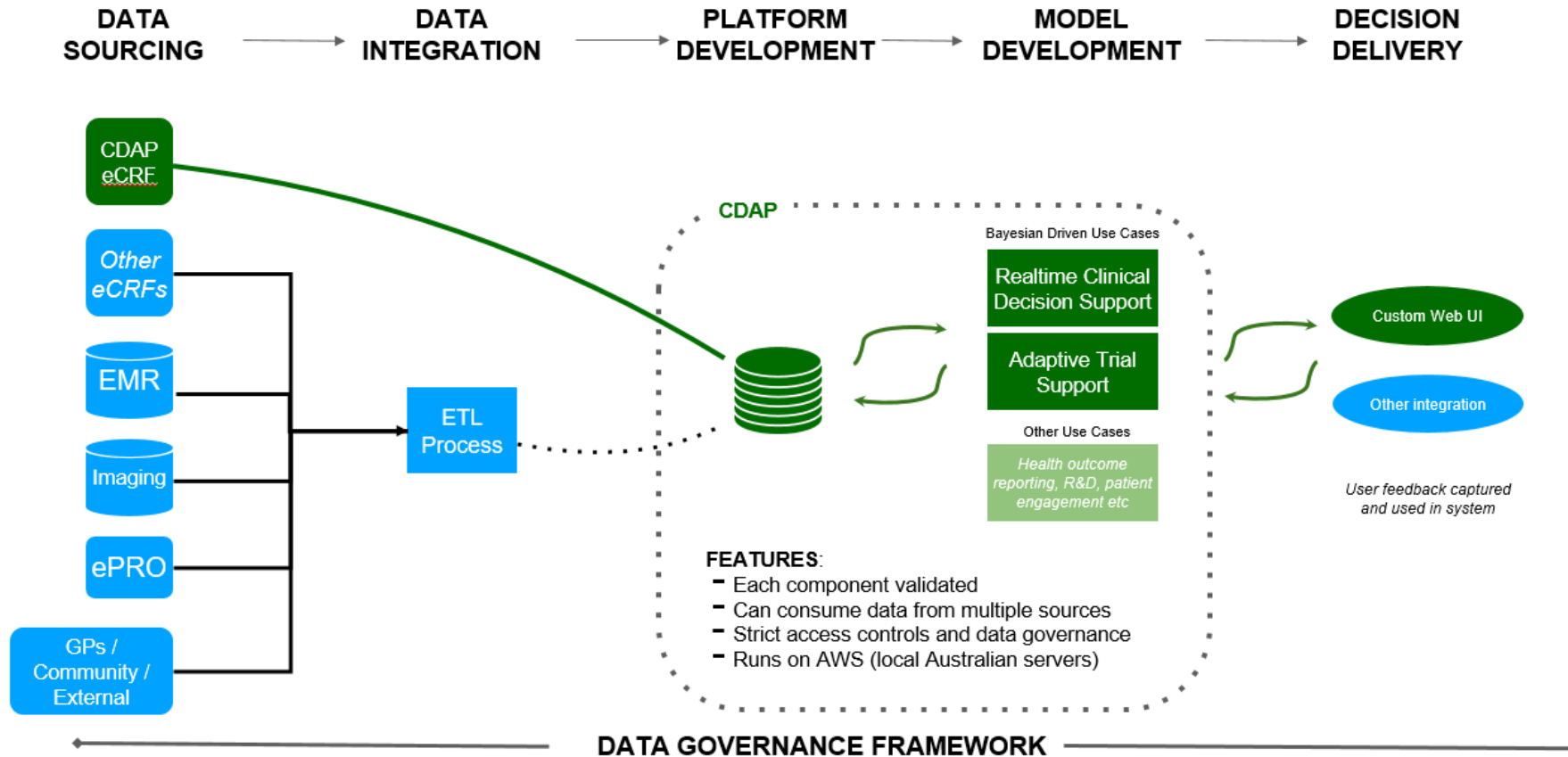


Nik Zeps, Director of Research,
Epworth Health

CDAP for COVID-19

- Collate clinical, laboratory and imaging data for COVID-19 patients that is accessible by authorised users
- Enable analytics of the clinical data to inform best-evidence patient care
 - Bayesian Network modelling (led by Ann Nicholson)
- Enable Bayesian adaptive clinical trials
 - Aiming to support recently funded MRFF project: “Repurposing existing medications to reduce severe acute respiratory distress in patients with COVID-19: the CLARITY trial” led by Meg Jardine from UNSW
- Track persisting morbidity and susceptibility to recurrent infection

Overview of platform



Post COVID-19

- The pandemic provided real motivation to work efficiently across state/health boundaries
- A template to do this internationally?
- CDAP is disease and condition agnostic
- Wide applicability – Currently working on developing CDAP for orthopaedics
- Base digital infrastructure is open source, freely available
- Further information can be found here: <https://www.covidcdap.org/>
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