Australian initiatives in digital health during the pandemic crisis and after

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**UN COPUOS**

Digital Health

- Digital technologies are being harnessed to support the public-health response to COVID-19

- Population surveillance, case identification, contact tracing and evaluation of interventions on the basis of mobility data and communication with the public.

- How? Leverage mobile phones, large online datasets, connected devices, relatively low-cost computing resources and advances in machine learning and natural language processing.

Space derived technologies in digital health

- Pioneered in 2009, with telehealth in support of the remote areas

- In 2019, the National Electronic Health Records system (myhealthrecord) was implemented that interconnected health practices, laboratories, pharma and allied health

- Telehealth infrastructure was enabled by National broadband network initiative

- By 2020, it was possible for servicing remote regions and communities using telehealth
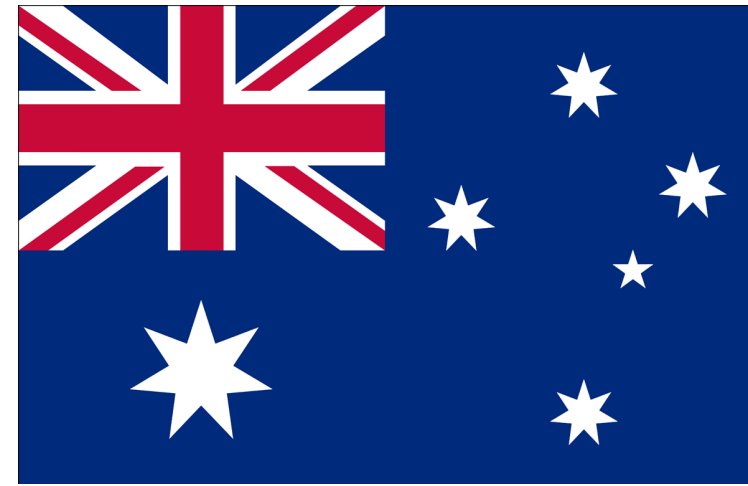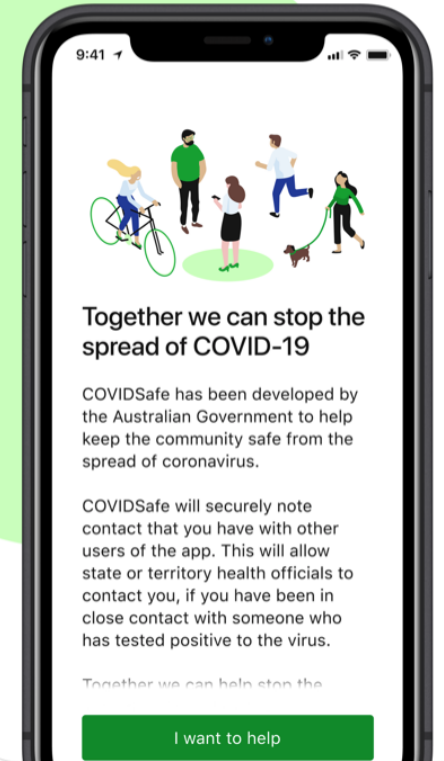
CovidSafe
Australia

Stops the spread

Get Notified Quicker

Privacy Preserved

Initiatives during Covid-19

- Remote care to patients with chronic conditions or with mild/moderate illness serviced via telehealth

- E-prescriptions were enabled mainstream

- Lowered the barriers and reluctance relating to e-health records management

- Tracking devices are used to monitor quarantine breaches
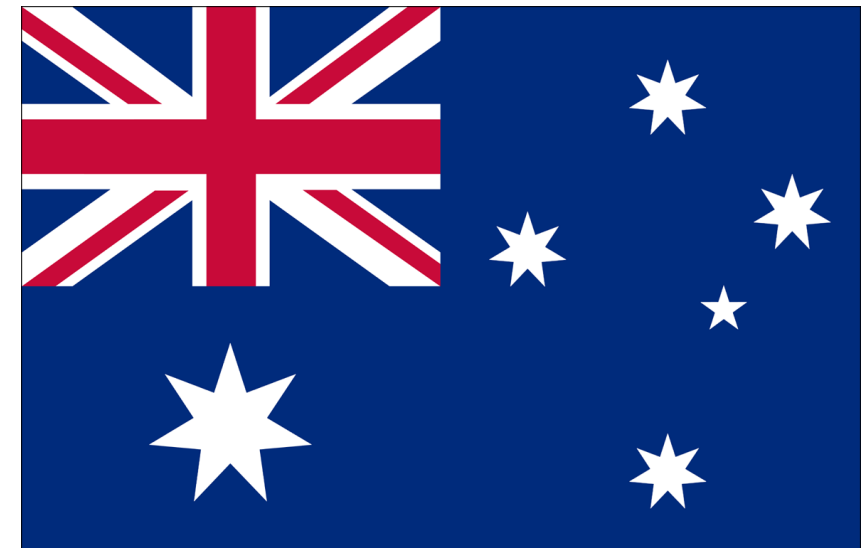
During Covid-19

- Pandemic Drones are being used to ensure social-distancing and quarantine regulations

- University of South Australia is designing a "pandemic" drone to detect virus symptoms such as fever and coughing from a distance. The drones use sensors and computer vision systems to monitor people's temperature and heart rates, and detect people coughing in crowds.

- The drone could be used post pandemic to manage public health crises.

Australian Government
Department of Health

BE COVIDSAFE

Covid-19 Dashboard
Nowcasting, Real-time data streaming and processing

CURRENT STATUS OF CONFIRMED CASES

29,519	910	155
Total cases	Total deaths	Active cases

3
CURRENT CASES
INTENSIVE CARE UNITS (ICU)

ACT	NSW	NT	QLD	SA	TAS	VIC	WA
0	1	0	0	1	0	0	1

44
CURRENT CASES
ADMITTED TO HOSPITALS

ACT	NSW	NT	QLD	SA	TAS	VIC	WA
0	4	11	27	1	0	0	1

16,357,455

0.2% POSITIVE

TOTAL TESTS CONDUCTED

ACT	NSW	NT	QLD
195,604	5,532,308	166,081	2,400,577
POSITIVE 0.1%	POSITIVE 0.1%	POSITIVE 0.1%	POSITIVE 0.1%

SA	TAS	VIC	WA
1,230,126	204,493	5,645,786	982,480
POSITIVE 0.1%	POSITIVE 0.1%	POSITIVE 0.4%	POSITIVE 0.1%

DAILY NUMBER OF REPORTED CASES
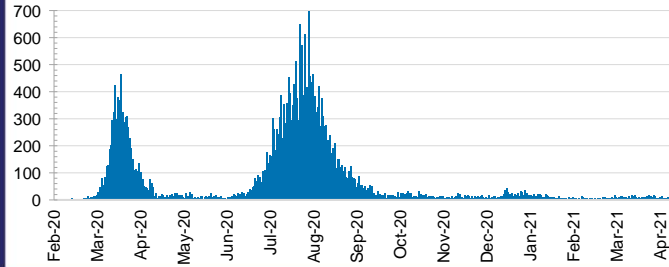
CASES IN AGED CARE SERVICES

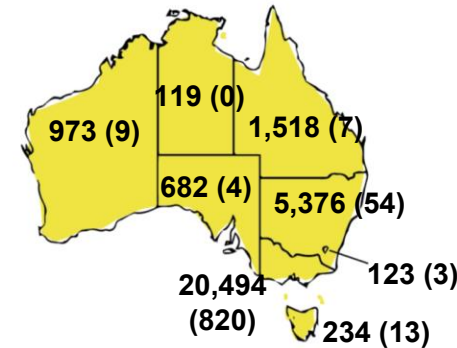| Confirmed Cases	Australia	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Residential Care Recipients	2051 [1366] (685)	0	61 [33] (28)	0	1 (1)	0	1 (1)	1988 [1333] (655)	0
In Home Care Recipients	81 [73] (8)	0	13 [13]	0	8 [8]	1 [1]	5 [3] (2)	53 [48] (5)	1 (1)

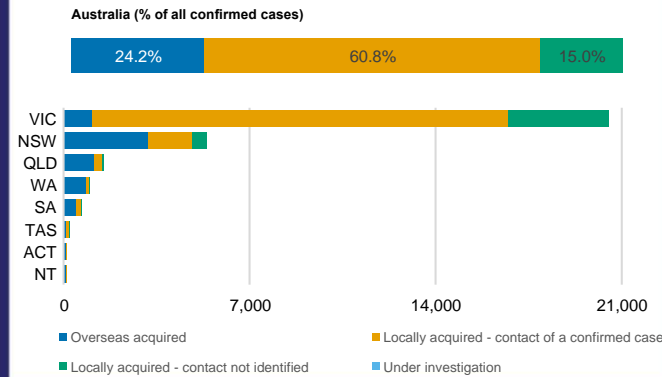Cases in care recipients [recovered] (deaths)

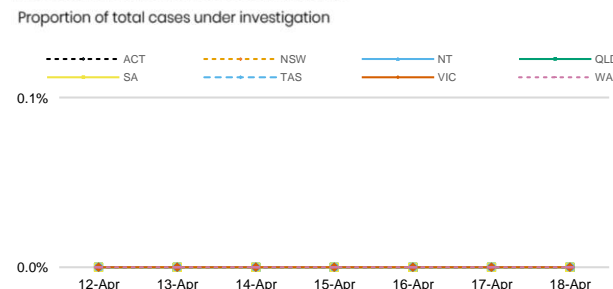## CASES BY AGE GROUP AND SEX
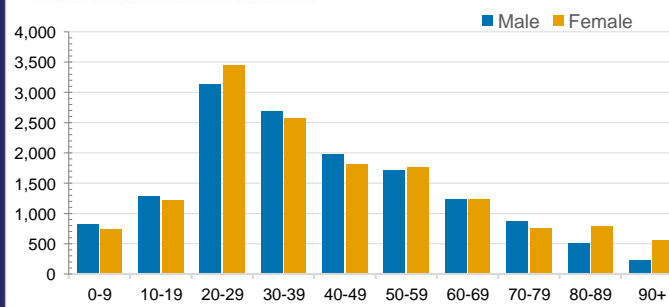
DEATHS BY AGE GROUP AND SEX
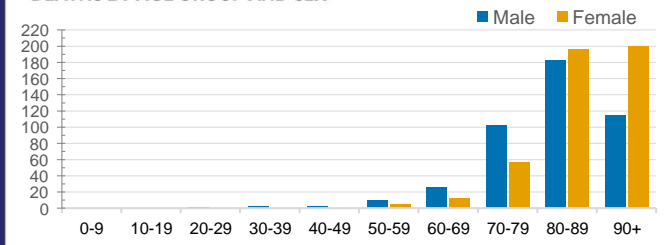
CASES (DEATHS) BY STATE AND TERRITORIES

119 (0)
973 (9)
1,518 (7)
682 (4)
5,376 (54)
123 (3)
20,494 (820)
234 (13)

CASES BY SOURCE OF INFECTION

Australia (% of all confirmed cases)

24.2%	60.8%	15.0%

■ Overseas acquired
■ Locally acquired - contact of a confirmed case
■ Locally acquired - contact not identified
■ Under investigation

PUBLIC HEALTH RESPONSE MEASURE

Proportion of total cases under investigation

SAGEFOX

Post Pandemic

- Telehealth – the New Normal since March 2020, including remote areas, rural or urban areas – to all.

- The **Vaccination Eligibility checker** assists in self-managing vaccinations

- The **Clinician Vaccine Integrated Platform** (CVIP) is used to manage vaccinations and report vaccination information to the Australian Immunisation Register (AIR).

- Self management using wearables – connecting to health practices and GPs – the new way forward enabled by geospatial and space derived technologies in public health.

COVID-19 VACCINATION

Vaccine Eligibility Checker