



Review of the impact of the Pathology Sector Response to the COVID-19 Pandemic Australian Pathology

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Context

Deloitte was engaged by Australian Pathology to conduct a rapid review of the impact of the pathology sector response to the COVID-19 pandemic.

The existence of a strong private pathology sector to rapidly scale testing capability and the collaboration between public and private healthcare providers was a significant contributor to the country's pandemic containment strategy.

Overview of Australia's pandemic response

The initial strategy was to contain the spread of COVID-19, limit case numbers and buy time for a vaccine or antiviral therapy to become available without overwhelming our healthcare systems. This strategy relied heavily on our ability to provide rapid and accurate testing of symptomatic individuals to enable case isolation, contact tracing and therapeutic intervention where required.



73 million

PCR tests were provided by the Australian pathology sector from April 2020 – June 2022.



34.4 million

Tests were claimed via MBS SARS-CoV-2 codes for subsidies.



70%

Of all PCR tests undertaken in Australia were performed by private pathology providers, equating to 51.5 million tests.



0.14%

Was Australia's COVID-19 fatality rate, one of the lowest in the world.

How did the pathology sector help to achieve this?

The response of the pathology sector was built around four key streams of activity.



Providing the ability to rapidly scale and deliver efficient pathology services.



Providing timely and equitable access to disadvantaged populations.



Providing faster turnaround time in test reporting.



Collaborating and mobilising resources to respond to key testing challenges.

The impacts of the Australian Pathology sector's response

Reduced community spread of COVID-19

Adequate and available pathology testing was critical to identifying and containing outbreaks and informing public health interventions.

Supported communities and the economy

Without adequate testing, lockdowns would have been longer and had greater economic disruptions.

Improved health outcomes

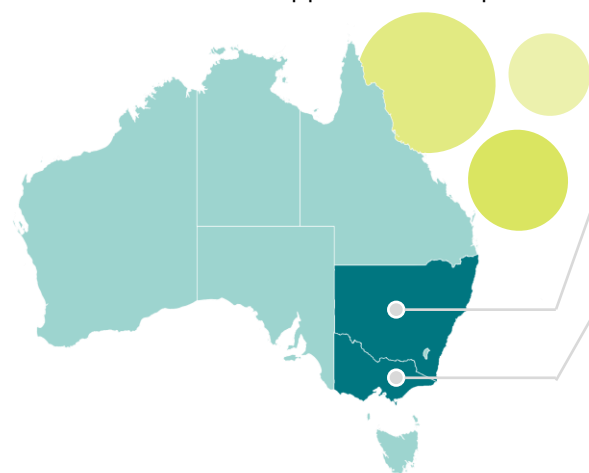
Early diagnosis allowed isolation, reduced transmission and improved outcomes for patients.

Protected hospitals and public health system

Accurate and timely diagnosis through pathology testing helped to reduce acute health system demand.

Australian jurisdictional and international response

Under the leadership of a National Cabinet that brought together heads of Federal and State governments, and with ongoing collaboration amongst health departments across the country, Australia coordinated its initial approach to the pandemic better than many.



NEW SOUTH WALES

NSW had the highest PCR testing per capita of all states in Australia at **4.27**. This allowed the government to take the appropriate measures with the State being the main point of incursion of international cases coming from cruise ships and travellers during the initial stages of the pandemic.

VICTORIA

High testing rates (PCR tests per capita ratio of **3.38**) in Victoria were critical in informing government and policy makers in developing public health orders and restrictions required to contain the spread of COVID-19. Early and rapid detection of cases was critical to informing the timing of public health orders and restrictions, as seen in late 2020 with the State's Roadmap to Reopening, predicated on specific conditions being met around community transmission (i.e. reduced case or no new cases).

This, together with all other Australian jurisdictions, meant the following for Australia:

0.2%

Positivity rate for the initial 12 months after the WHO declared COVID-19 a global pandemic. The threshold recommended by the WHO for a positivity rate considered high is 5%.

92%

Of all symptomatic cases were detected. The accuracy of PCR testing undertaken by the Australian private pathology sector enabled the country to endure the early stages of the pandemic with lower death rates than seen in comparable jurisdictions.

0.0035%

Mortality rate. Higher rates of PCR testing in Australia allowed effective case detection, tracing, treatment and isolation that was not possible in the comparator countries that did not have effective pathology sector responses.

15 months

To rebound to pre-pandemic economic levels. Faster community transmission and lower PCR testing resulted in deeper economic downturns in countries, with the US and Canadian unemployment rates peaking at nearly 15% and over 13%, respectively.

Australia's key COVID-19 figures compared with the UK, US and Canadian jurisdictions:

	Australia	UK	US	Canada
Total Population	25.8M	68.6M	331.0M	38.5M
Total Tests	76.9M	502.5M	912.8M	62.2M
Total Positive Cases Reported*	10.2M	22.7M	94.4M	4.2M
Total Deaths Reported	14,029	204,613	1.05M	44,472
Positivity rate	0.2%	4.5%	10.3%	6.8%
Case Fatality Ratio	0.14%	0.90%	1.11%	1.06%
Mortality rate	0.0035%	0.3%	0.32%	0.12%

Data sourced from Covidlive and Our World in Data from Jan 2020 to end of Aug 2022
*Total Positive case reported include both self reported and PCR detected.

International pathology responses

US



The US faced PCR capacity constraints earlier than Australia due to high case

loads during the initial waves, putting extra strain on turnaround times in the pathology sector to catch the spread. The US became the epicentre of the pandemic in 2020, causing increased testing turnaround times and an earlier shift towards Rapid Antigen Tests (RATs).

CANADA



The response in Canada was similar to Australia, as the pathology sector

was able to rapidly ramp up PCR testing capacity and ensured sufficient capacity to meet the demand during earlier waves. The Omicron wave resulted in excessive testing demand, resulting in a pivot to a RAT testing strategy.

UK



The UK's NHS Test and Trace Programme was established once

case numbers had already reached 2,000 cases/ day. This limited timely contact tracing aided by PCR testing to contain the outbreak. As the UK pathology sector is disaggregated, collaboration of commercial labs and logistics services were required to meet testing capacity.

Future of pathology in a post-pandemic health system

In the post-COVID-19 era, the pathology sector will be vital in supporting improved diagnostics, life-long personalised wellness management, genomic based therapies and public health protection.



Next pandemic infectious agents could emerge at any point

Ability to identify and discern new variants of COVID-19 and the emergence of new infectious agents capable of causing epidemics and pandemics requires genomic testing capability.



A vibrant pathology sector is critical to pandemic preparedness

Ability to rapidly scale pathology testing is essential to pandemic readiness. This includes adequate network of collection centres, testing laboratories and skilled workforce.



Risks arising from tests not performed during the pandemic

Missed diagnostics and monitoring of non-COVID-19 tests will likely manifest in increased acute presentations and chronic disease burden downstream in the coming years.



Demand for healthcare is likely to continue to grow

Due to aging population, increased focus on early detection and prevention of disease. This will require investment in pathology capabilities.



Healthcare is becoming increasingly personalised

With the reimagining of health delivery increased focus on personalised care, pathology services must align to support contemporary models (e.g. molecular testing and genomics).