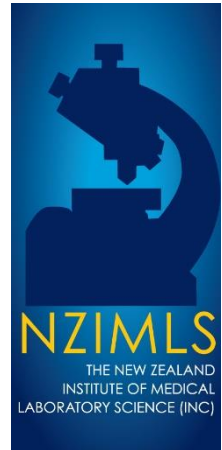


New Zealand Diagnostic Laboratory Scene

May 2022 (updated May 2023)



Introduction

New Zealand has undergone many different changes to how diagnostic laboratory services are funded and provided since the District Health Boards (DHB) were formed in 2001. The original laboratory setup was aligned around DHB's having the individual hospital and specialist Tier one services as DHB owned and controlled entities. The community or tier two laboratory services were provided by pathologist owned and operated commercial community laboratory businesses. The Tier one DHB laboratories operated under a fixed contract system and the community laboratories on a fee for each performed test basis. The system of funding of a fee for each scheduled diagnostic test led to an increase in emphasis on doing as many community tests to increase the revenue collected leading to a totally unsustainable community pathology system. This coincided with a move from pathologist owned to corporate community laboratory ownership.

In 2005 the first Request for Proposal (RFP) for pathology services was rolled out by the then Southland and Otago DHB for all pathology services within this DHB. This has continued throughout the past 15 years in some form by all DHB's in New Zealand. This individual DHB approach has led to a fragmented laboratory system with differences in service provision and testing depending on which DHB region you come from and which provider has the current laboratory contract. Many experienced scientists and technicians have been forced out of the medical laboratory science profession with each change in contract and provider. Samples end up traversing the country depending on the contract provider and there is no national governance or communication approach to overcome the fragmented system. The laboratory contracts are not long term so there is a reluctance to future proof the service provided by reinvestment in staff and up to date equipment with appropriate research and development. There has been a move within from training New Zealanders to bringing in overseas workers which has resulted in an unstable workforce demographic. This coupled with an ageing workforce and lack of incentivized career progression is harming the bones of the medical laboratory science profession in New Zealand. In saying that New Zealand does have a large group of talented medical laboratory health professionals who provide an amazing service despite the many challenges that the profession has faced in recent years.

There are 44% of our New Zealand hospital laboratory contracts owned by commercial providers. 75% of the Tier two community service contracts are owned by one commercial company. In total 75% of the New Zealand pathology testing capacity is from commercial laboratory providers. This includes hospital-based laboratories in Wellington, Dunedin, Palmerston North, Gisborne, Invercargill, Nelson, Blenheim, Rotorua, Tauranga, Taupo, Whanganui, Hutt Valley, Whakatane, Masterton and Timaru that are not owned or operated by their respective DHB's.

Please note as of 1st July 2022 all District Health Board (DHB's) became part of Te Whatu Ora (Health NZ)

Please note as of April 20th 2023 Asia Pacific Healthcare Group (APHG) has rebranded as Awanui.

Figure one. Shows the percentage population catchment of New Zealand diagnostic laboratory providers contracted to provide DHB Hospital services (Tier one).

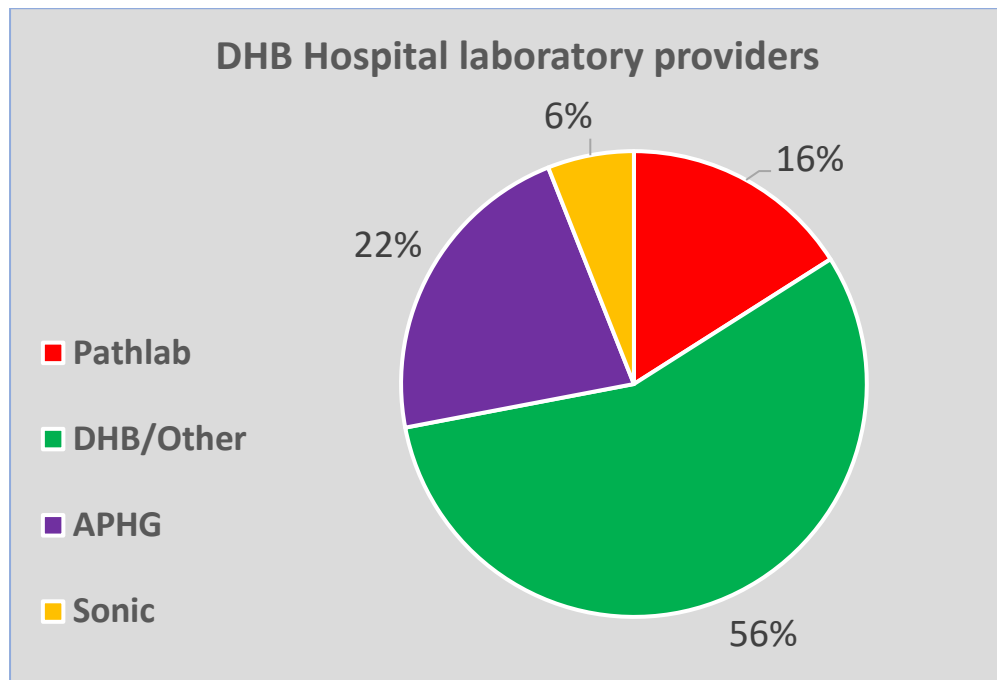
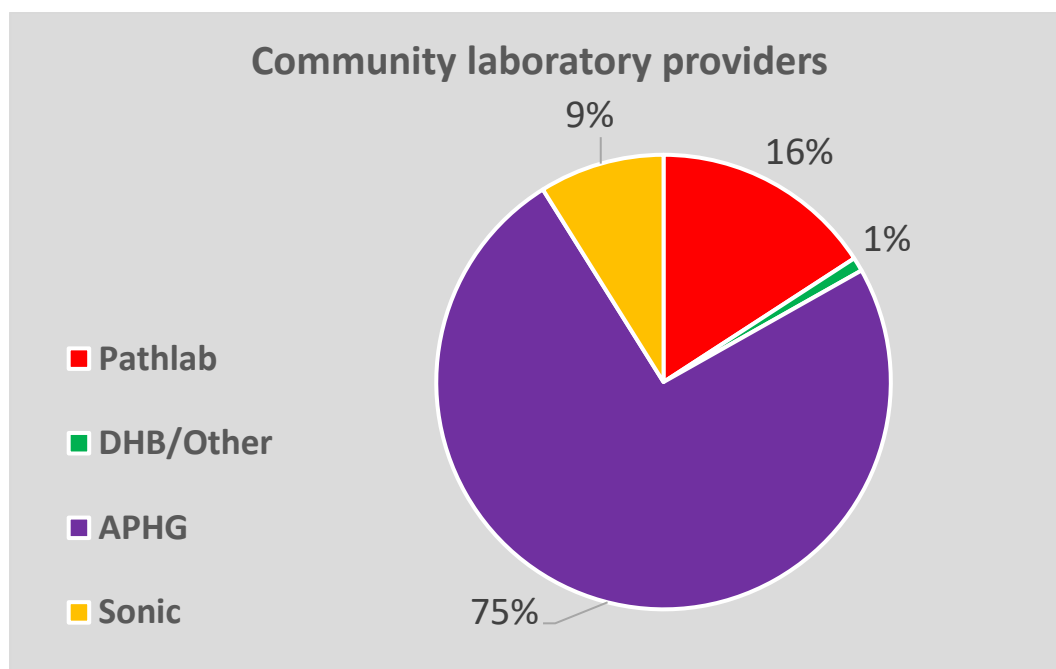


Figure two. Shows the percentage population catchment of New Zealand diagnostic laboratory providers contracted for community services (Tier two).



*APHG (Asia Pacific Healthcare Group), DHB (District Health Board).

*All data reproduced from the AFR 19/4/2020

There are five Tertiary laboratories in New Zealand along with one Crown Research Institute listed below:

- LabPlus (DHB) **Tertiary laboratory**
- Waikato Hospital Laboratories (DHB) **Tertiary laboratory**
- Wellington SCL (APHG NZ) **Tertiary laboratory**

- Canterbury Health Laboratories (DHB) **Tertiary laboratory**
- Dunedin Hospital SCL (APHG NZ) **Tertiary laboratory**
- ESR (Crown Research Institute)

The following summary includes an explanation of the broad laboratory contracts. However, it does not outline the myriad of specific testing anomalies that occur within the actual DHB laboratory contracts such as tests travelling to several different destinations depending upon individual DHB providers.

Diagnostic Medical Laboratories in New Zealand by DHB Regions

1. Auckland Region

The Auckland region has a clear distinction between DHB Tier one services and all the DHB's in the greater Auckland region own and fund their hospital laboratory services. The Tier two services are on a fixed contract to a commercial provider.

Labtests (APHG NZ) is contracted for all community-based Tier two testing across the wider Auckland region.

Northland DHB

- Kaitia Hospital (DHB)
- Bay of Islands Hospital laboratory (DHB)
- Whangarei Hospital Laboratory (DHB)
- Dargaville Hospital Laboratory (DHB)
- Northland Pathology (APHG NZ)

Waitemata DHB

- Waitemata Hospital Laboratory (DHB)
- North Shore Hospital Laboratory (DHB)

Auckland DHB

- LabPlus (DHB) **Tertiary laboratory**

Counties Manukau DHB

- Middlemore Laboratory (DHB)

2. Waikato Region

Waikato DHB

The Waikato region has a clear distinction between DHB Tier one services and all the DHB's in the greater Waikato region own their hospital laboratory services. The Tier two services are on a fixed contract to a commercial provider (Pathlab). Specialist testing is performed at Waikato Hospital Laboratory. It is noted that all community (Pathlab) Microbiology and Immunology is performed at Pathlab Tauranga.

- Waikato Hospital Laboratories (DHB) **Tertiary laboratory**
- Thames Hospital Laboratory (DHB)
- Taumarunui Hospital Laboratory (DHB)
- Tokoroa Hospital Laboratory (DHB)
- Te Kuiti Hospital Laboratory (DHB)
- Pathlab Hamilton Laboratory (Pathlab)

Bay of Plenty DHB

- Pathlab Tauranga Hospital Laboratory (Pathlab)
- Pathlab Whakatane Hospital Laboratory (Pathlab)

Lakes DHB

All specialised Immunology and Biochemistry plus all Microbiology testing goes to Pathlab Tauranga.

- Pathlab Rotorua Laboratory (Pathlab)
- Pathlab Taupo Hospital Laboratory (Pathlab)

Tairāwhiti DHB

All non-routine work goes to either MidCentral Medlab or onto Canterbury Health for other specialised work.

- T-Lab Gisborne (Sonic Healthcare)

3. Wellington/Central Region

Taranaki DHB

Tier one hospital services owned and serviced by the DHB and Tier two services contracted out to a single provider (APHG NZ). Specialised work goes to Canterbury Health. Some work to Wellington SCL (APHG NZ) and Dunedin SCL (APHG NZ).

- Taranaki Base Hospital Laboratory (DHB).
 - Hawera Hospital Laboratory (DHB).
- Specialised work split between APHG NZ sites at Wellington SCL, Labtests Auckland and Dunedin SCL.*
- Taranaki Pathology (APHG NZ)

Hawkes Bay DHB

There is a 50/50 split between all the laboratory services between the DHB and a single Tier two provider (APHG NZ). Specialised work split between Canterbury Health, LabPlus (DHB-Auckland) and Dunedin SCL (APHG NZ).

- Hawkes Bay Hospital (DHB).
- Hastings SCL (APHG NZ)

Whanganui DHB

All the DHB laboratory services contracted out to a single provider (Sonic Healthcare). All non-routine work goes to either MidCentral Medlab or onto Canterbury Health for other specialised work.

- Medlab Whanganui (Sonic Healthcare)

MidCentral DHB

All the DHB laboratory services contracted out to a single provider (Sonic Healthcare). Specialised work goes to Canterbury Health.

- MidCentral Medlab (Sonic Healthcare).

Wairarapa DHB

All diagnostic laboratory services are contracted out to a single provider (APHG NZ). Specialised work goes to Wellington SCL.

- Wairarapa Hospital Laboratory (APHG NZ)

Hutt DHB

All diagnostic laboratory services are contracted out to a single provider (APHG NZ). Specialised work goes to Wellington SCL.

- Hutt Valley Hospital (APHG NZ)

Capital Coast DHB

All diagnostic laboratory services are contracted out to a single provider (APHG NZ).

- Wellington SCL (APHG NZ) **Tertiary laboratory**
Specialised work goes to Wellington SCL.
- Kenepuru Hospital Laboratory (APHG NZ)

4. Canterbury Region

Nelson Marlborough DHB

All laboratory services contracted to a single provider (APHG NZ). Specialised work split between Canterbury SCL, Dunedin SCL and Wellington SCL.

- Nelson Medlab (APHG NZ).
All non-urgent laboratory tests are couriered through to Nelson Medlab daily.
- Wairau Hospital Laboratory (APHG NZ)

West Coast DHB

DHB owns, funds and provides the laboratory services. All specialised tests are sent to Canterbury Health.

- Grey Hospital Laboratory (DHB)

Canterbury DHB

Tier one services are owned, funded and provided by the DHB. All Tier two community services contracted to a single provider (APHG NZ). All specialised tests taken within Canterbury DHB are sent through to Canterbury Health.

- Canterbury SCL (APHG NZ)
- Canterbury Health Laboratories (DHB) **Tertiary laboratory**
- Ashburton Hospital Laboratory (DHB)

South Canterbury DHB

All diagnostic laboratory services are contracted out to a single provider (APHG NZ). Specialised tests sent to Dunedin SCL if performed at that site or Canterbury Health for all other tests.

- Timaru Medlab (APHG NZ)

5. Otago Region

All diagnostic laboratory services are contracted out to a single provider (APHG NZ). Specialised tests sent to APHG NZ laboratories in the first instance if performed elsewhere in the network. Tests not performed in other APHG NZ laboratories sent to Canterbury Health or LabPlus.

Southern DHB

- Oamaru Hospital SCL (APHG NZ)
- Dunedin Hospital SCL (APHG NZ) **Tertiary laboratory**
- Dunstan Hospital SCL (APHG NZ)
- Queenstown SCL (APHG NZ)
- Invercargill SCL (APHG NZ)

Accredited to provide diagnostic trace metals testing only.

- Gribbles Veterinary Laboratory (APHG NZ)

Other Diagnostic Service Providers

Any of these services operate alongside the base primary diagnostic laboratory services in New Zealand. Some of these entities have national or DHB contracts and operate within the laboratories listed above.

- ESR laboratories (Crown Research Institute).
- New Zealand Blood Service including haemovigilance and tissue typing (NGO).
- Wellington genetics (DHB funded genetics).
- IGENZ (Commercial genetics business).
- Communio (Commercial mortuary and forensic pathology business).
- National Cervical Screening Program (National Screening Unit, MoH), (Transferred to Te Whatu Ora July 1 2022).
- National Bowel Screening (National Screening Unit, MoH), (Transferred to Te Whatu Ora July 1 2022).
- National Breast Screening (National Screening Unit, MoH), (Transferred to Te Whatu Ora July 1 2022).
- National Forensic Pathology Service (Ministry of Justice/ADHB), (Transferred to Te Whatu Ora July 1 2022).
- Newborn Metabolic Screening Programme (National Screening Unit, MoH). (Transferred to Te Whatu Ora July 1 2022).
- Antenatal Screening for Down syndrome and Other Conditions (National Screening Unit, MoH), (Transferred to Te Whatu Ora July 1 2022).
- Fertility associates (Commercial business).
- DNA Diagnostics Ltd (Commercial genetics business).
- Coronial Services Unit (Ministry of Justice)
- Rako science (Commercial COVID testing) acquired by APHG Oct 2022 (Now disestablished).
- Hills laboratories (Commercial COVID testing)

Commercial Diagnostic Laboratory Providers of DHB Contracts in New Zealand

Pathlab is a New Zealand owned and operated pathology service provider. The owners are a group of local Waikato and Bay of Plenty pathologists and business partners. Pathlab has a **16%** share in Tier two community laboratory testing and **16%** of DHB hospital services.

Asia Pacific Healthcare Group New Zealand (APHG NZ) now Awanui as of 20th April 2023 is a merger that came from the sale of Healthscope NZ in mid-2020. This is made up of a 48% share with New Zealand Superannuation, another 48% share with the Ontario Teachers Pension Fund and the Māori investment fund Te Pūia Tāpapa..

APHG NZ have a **75%** share in Tier two community laboratory testing and **22%** of DHB hospital services.

Sonic Healthcare is a global healthcare company with a large portfolio of diagnostic laboratories all over the world, particularly in Europe. They also have a significant stake in commercial radiology services in New Zealand. Sonic is an ASX50 listed company based in Sydney. Sonic healthcare has a **9%** share in Tier two community laboratory testing and **6%** of DHB hospital services.

Conclusion

Medical laboratory scientists and technicians work in diagnostic laboratories in every corner of New Zealand and provide an essential frontline health service for the public of New Zealand. For a country with a population of 5 million to have over 40 diagnostic laboratories split between 20 DHB's and the three major commercial DHB contract providers, and many more minor providers, shows how fragmented our laboratory service has become.

There is also a clear reliance on commercial providers within hospital facilities that are not under national governance or control. It is clearly apparent that there needs to be a way of coordinating the move to a more structured and functional diagnostic laboratory service that allows for streamlined and cost-effective services, less specimen miles and more efficient use of the expertise that is spread throughout the profession.

The patient centric approach to healthcare needs to be reinforced by strong policy and governance with an emphasis on reinvestment, equality and sustainability for future generations of New Zealanders.

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