

# Briefing for Incoming Minister



October 2017



# Welcome

Dear Minister,

We would like to take this opportunity to welcome you to the New Zealand Artificial Limb Service (NZALS) team.

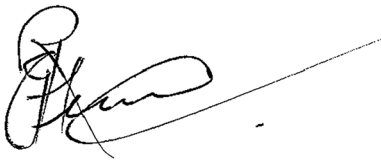
The service is a autonomous Crown entity, contracted by Accident Compensation Corporation (ACC) and the District Health Boards (DHB's) to provide services to New Zealanders who have experienced limb loss and/or are at risk of limb loss.

This briefing provides an overview of NZALS, our strategic objectives, our key risk (property) with our current and future direction, and opportunities.

We will be seeking your direction and leadership to support NZALS and our efforts to improve the lives of people we care for.

We look forward to working with you.

Kind regards,

A handwritten signature in black ink, appearing to be 'John', with a long horizontal line extending to the right.

Chairman

NZALS

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## Vision

Independent and productive lives for our patients

## Mission

To enable amputees to achieve independence by delivering prosthetic, orthotic and rehabilitation services

## Key achievements

1 July 2015 to 30 June 2017

Stakeholder consultation for the development and implementation of NZALS 2021 strategy

### Service

20% increase in services and technology provision

44% increase rehabilitation and coordination of care

Introduced an upper limb specialist programme and orthotic service for our patients

### Expert workforce

Restructured the organisation, job expectations and performance framework to align with the NZALS 2021 strategy

Implemented succession planning which has reduced patients with a clinical prosthetist retiring in the next 5 years from 44% to 12%

### R&D/Technology

New collaborations with MedTech academic institutions including Victoria University with 6 interns and 3 masters students working on 3D printing projects

Supported NZ start up commercialisation efforts of Taska Prosthetics; new robotic hand with international demand

### Equity

Created internal competition through our continuous improvement programme and associated measures

\$1m social investment to support independent and productive lives for above knee DHB amputees

# Overview

NZALS is a specialist healthcare provider that manufactures high technology medical devices, mainly artificial limbs, for individual patients with an integrated rehabilitation and coordination of care service.

## Minister

The Ministry of Social Development has overarching responsibility for NZALS. More recently the day to day responsibilities have been delegated to the Minister of Disability Issues.

## Status / Legislative mandate

NZALS is an autonomous Crown Entity under the Crown Entities Act 2004 and is required to comply with the Public Finance Act 1989.

Social Welfare (Reciprocity Agreements, and New Zealand Artificial Limb Service) Act 1990

## Vision

Independent and productive lives for the patients we care for.

## Mission

To enable our patients to achieve independence by delivering prosthetic, orthotic and rehabilitation services.

## Function

The legislative functions of the Service are:

1. to manufacture, import, export, market, distribute, supply, fit, repair, and maintain artificial limbs and similar devices
2. to provide rehabilitative and other services to persons in connection with artificial limbs and similar devices
3. to carry out research and development in relation to artificial limbs and similar devices
4. to advise the Minister on matters relating to artificial limbs and similar devices.

## Board/CEO

George Reedy, Chair - appointed 1/3/2011, expires 31/12 2018

Faye Sumner - appointed 15/3/2013, expires 31/10/2019

Alan Thurston - appointed 1/7/2014, expires 30/6/2020

Kevin Ross - appointed 1/11/2016, expires 31/10/2019

Cynthia Bennett - appointed 1/11/2016, expires 31/10/2019

Sean Gray (CEO) – appointed 15/1/2015

## Key 2017 financials

Revenue \$13m (\$4.7m DHB and \$7.2m ACC)

Net equity \$4.1m

## Flash points

1. NZALS Centres require \$5 million repairs and maintenance with significant associated health and safety, and reputation risk in Auckland, Hamilton, Wellington and Christchurch.
2. Our patient groups are small and have a highly specialist service need in a fast-moving technology environment with no New Zealand qualifications to support workforce development.
3. A complication of diabetes and vascular disease is amputation which currently represents 52% of all referrals to NZALS with increasing comorbidities and complexity of need.
4. There is significant inequity in service received by ACC and DHB patients, specifically, in 2016/2017, NZALS received an average of \$1,998 and \$4,274 per patient for DHB and ACC respectively.
5. Management and Board are constrained from responding to these challenges under the current governance and ownership structure.

## Brief history

2013 - Legislated name change to New Zealand Artificial Limb Service.

1990 - The New Zealand Artificial Limb Board and the Social Welfare (Transitional Provisions) Act 1990 came into force [now known as the Social Welfare (Reciprocity Agreements, and New Zealand Artificial Limb Service) Act 1990].

1969 - The government appointed the Disabled Servicemen's Re-establishment League as agent for both ex-servicemen and civilians. The league created the New Zealand Artificial Limb Board as a delegated Board under their authority.

Prior to the above, the entity has been aligned and involved with the Disabled Servicemen's Re-establishment League and the Soldiers' Civil Re-establishment League.

# Strategic objectives

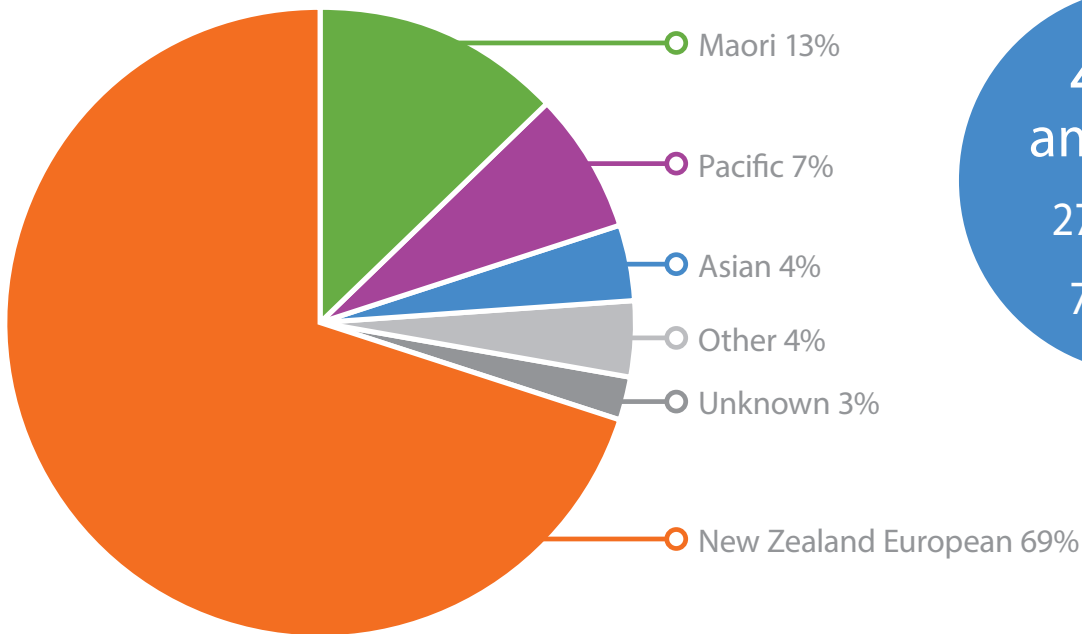
NZALS engaged and consulted widely with patients, patient consumer groups, staff and key stakeholders. These efforts resulted in a comprehensive analysis of NZALS' internal and external business environment. This analysis was then used by NZALS' Board with management input, to develop the following four 2021 NZALS Strategic Objectives.



"New Zealand has to deal with the challenges and opportunities presented by a changing population, shifting social trends and advances in technology. An ageing population brings greater demand for health services and support to help older people live healthy and independent lives."

Health and Independence Report 2016 The Director-General of Health's Annual Report on the State of Public Health

# 2017 statistics



**4,354** amputees  
27% female  
73% male

This year:

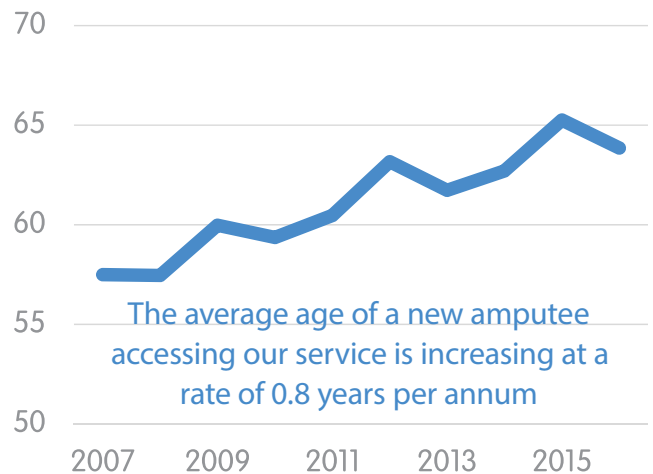
**411** new amputees accessing the service:

24% trauma

52% diabetes & vascular disease

24% cancer, congenital & infection

Average age of new amputees by year:

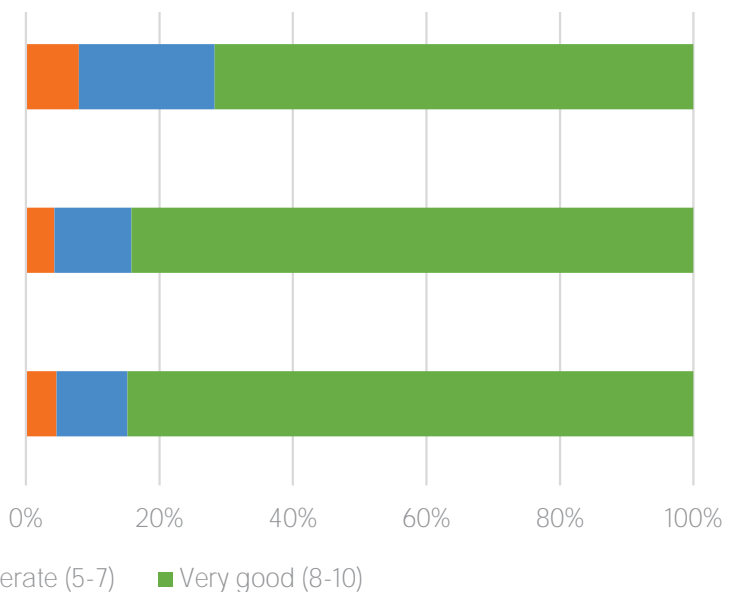


Independent satisfaction survey; 315 patients:

All things considered, how well did we set you up to be independent and productive in your local community and at home?

How would you rate the overall service you received for the job we have undertaken for you?

Please rate how trusting and confident did you feel with the staff providing your care?



# Property risk

NZALS wants to take responsibility for our Centre properties enabled by service contracts that recover property costs. This will allow NZALS to make our Centres safe for our patients and staff, as well as use the property asset base to develop Regional Centres and deliver on our strategy.

## Background

NZALS provides wrap around services from five purpose built centres in Auckland, Hamilton, Wellington, Christchurch and Dunedin. These Centres support 14 Regional Clinic locations.

Each service centre has the following facilities:

1. Consultation rooms big enough for patient, family/whanau and health professionals
2. Separate female, male and children's fitting rooms as well as rehabilitation facilities
3. Comprehensive medical device (orthotic & prosthetic) manufacturing and stock facility
4. Reception, waiting room, toilets and parking

NZALS currently has peppercorn leases with MSD for Auckland, Hamilton, Wellington and Christchurch centres. NZALS leases the Dunedin centre from Southern DHB.

NZALS service contracts with ACC and DHB's do not include property cost recovery.

## Property issues

NZALS' centres are appropriately located to support our vision and strategy. Unfortunately, they are not fit-for-purpose, requiring over \$5 million in urgent repairs (independently assessed by AECOM).

The property repairs represent significant Health and Safety and reputational risk for our responsible Minister, MSD, NZALS (board, executive, and team) and most importantly our patients who have high accessibility needs. Examples of our property risk are:

1. Wellington Centre – the building has an earthquake NPS rating of 14% and ongoing water leakage into service areas.
2. Auckland Centre – the building has an earthquake NPS rating of <34% and ongoing water leakage into service areas.
3. Christchurch Centre – decades of water damage, centre requires a complete rebuild.





## NZALS' response to these issues

NZALS has been actively trying to resolve these significant property issues with the relevant parties for decades. Unfortunately, to date, our property risks remain unresolved.

NZALS has pursued a strategy to assume MSD's property position in the NZALS Auckland, Hamilton, Wellington and Christchurch centres and simultaneously increase ACC and DHB service contracts to recover property costs. The current status is:

1. NZALS and MSD have reached an in-principle agreement with MSD to assume MSD's property position for the NZALS Auckland, Hamilton, Wellington and Christchurch centres. NZALS board approval still required subject to confirming cost recovery with ACC and DHB.
2. ACC have conducted a comprehensive pricing review of the national prosthetic service contract. The review is currently going through internal ACC processes. The proposed increase from ACC is contingent on DHB's contributing their equivalent share of property cost and NZALS assuming the above property position.
3. DHB's CEO's and General Managers of Planning and Funding have received multiple NZALS property papers to resolve NZALS property issues and allow NZALS to execute on points 1 and 2 above. In order to remain sustainable, NZALS will need to either:
  - Increase the contract price with DHB by \$824k per annum; or
  - Reduce services provided to patients by \$824k per annum.

This strategy and negotiation tactic is a pragmatic approach to resolving NZALS' property issues and will enable the following:

1. NZALS can address the \$5 million repairs and maintenance requirement of our centres to provide fit-for-purpose and safe centres for our patients and staff.
2. NZALS eliminate the current Health and Safety and reputation risk for the responsible Minister, MSD and NZALS.
3. A sustainable lease arrangement will be in place to ensure appropriate repairs and maintenance will occur. Specifically, it will move away from the current peppercorn lease arrangements which provide no incentive for ongoing repairs and maintenance.
4. Allow costs to be paid for by those receiving the service. Specifically, ACC and DHB's, not MSD.
5. Provide NZALS with a traditional balance sheet allowing the ability to borrow for property management and regional development. For example, new Regional Centres for areas like Northland, Hawke's Bay, Tauranga and Taranaki.

However, it does have a significant risk of reduced services to DHB patients if the DHB's do not contribute new funding to NZALS to cover new property costs.

# Operating Challenges

The combination of a small patient group with increasing complex needs, requirement of an expert workforce with no local qualification, an ageing population, significant increases in the burden of diabetes and vascular disease, and rapidly changing technology options represent a unique opportunity for NZALS.

## Increasing patient need and complexity

NZALS provides services to a small patient group of 4,354 amputee with three distinct segments:

1. Younger patients who have an increased level of mobility and need for advanced technology.
2. Older less active patients who have increasing service complexity needs related to diabetes and vascular disease complications.
3. Patients with multiple amputations who have significant complexity, high service and coordination of care needs. For example, we provide services to 23 patients under 25 years of age with multiple amputations.

A complication of diabetes and vascular disease is amputation. Diabetes and vascular disease is increasing in New Zealand.

New patient referrals to NZALS have an increasing average age of 0.8 years per annum. This is similar to New Zealand's total ageing population increase.

The NZ health system is under considerable funding pressure with an ageing population and the increasing rates of diabetes and vascular disease is having a profound impact on health and NZALS services.

1. Many long-term conditions, including diabetes, are increasing in prevalence however improvements in clinical care have reduced disease progression and case fatality. This coupled with an increasing average age, means patients have more 'other health-related issues' which increases their service needs, requirement for coordination of care and increasing clinical capability of the services.
2. The younger and more active DHB patients are disadvantaged by the health system pressures caused by the ageing population and the increase in diabetes and vascular disease. Additionally, their service and technology needs are the same as the ACC patients, however they cannot access the same services and technology, due to funding constraints they cannot achieve the same level of independence and productivity.

Patients can access information on the internet which creates patient and family/whanau expectations. This information needs to be supported by evidence for clinical application and appropriateness of technology for patient satisfaction.

## Inequity in services

Due to underlying funding principles of our key service contracts, ACC patients on average get access to 214% more services and technology than a DHB patient.

1. ACC patients are individually funded allowing access to more technology and rehabilitation services to improve their independence and productivity with an average spend of \$4,274 in 2016/2017 per patient.
2. DHB patients are funded from a bulk payment to NZALS for all 2,937 patients which equates to \$1,998 in 2016/2017 per patient. Note: This average amount includes small consumable payments from Health Benefits.

Our Maori and Pacific Island patients are more likely to experience health challenges that will see them requiring NZALS services. Firstly, Maori and Pacific Island patients are at greater risk of developing Type 2 diabetes and vascular disease. Secondly, in 2013/2014, the Ministry of Health reporting on the 'Nga mana hauora tutohu: Health status' indicates the following:

"Lower limb amputation is another complication of diabetes. Similarly, rates of lower limb amputation with concurrent diabetes for Maori were over 3 times that of non-Maori in 2012–14 (RR 3.44, CI 2.96–3.99). Therefore, among people with diabetes, lower limb amputations among Maori can be estimated as 1.7 times that of non-Maori."

It is generally accepted that people living in regional locations have significant barriers to access to health services which led to a reduced health outcomes. In this regard, the Ministry of Health have a Closer to Home strategic objective.

### Demand for new technology and research

NZALS operates in a very fast moving medical device technology space with component options that are highly individualised and specific for each patient or amputation type. There are the following opportunities and challenges around technology adoption and new research:

1. Improve a patient's mobility, independence and quality of life.
2. New technology and services in prosthetics and orthotics can be very expensive.
3. Considerable investment is required to train our expert workforce to appropriately prescribe, manufacture, provide rehabilitation and to support new technology.
4. Some technology and research can promise a lot but lack the evidence, regulatory approval, capability and support to deliver on the promise.
5. Some patients have trusted technology and service experiences developed over many years and are reluctant to change.



Genium X3 microprocessor knee worth approximately \$115,000

### A dynamic expert workforce

These operating challenges require an expert workforce that can adapt and evolve their capability to meet our patients needs now and into the future. Our workforce challenges are further tested with no orthotics and prosthetics qualifications available in NZ. As such, NZALS needs to invest in our team to ensure we have a world class expert workforce for our patients.

# Realising our future

The following section provides NZALS' approaches to address the operating challenges of today and to position the organisation for a sustainable future that leads to independent and productive lives for our patients.

## Wrap around & patient centred service

With the patient at the centre of everything we do, we need to ensure we are continually challenging ourselves to be better. Our future service model aspirations developed in consultation with stakeholders and linked to our strategy is to the right.

We include 'the person at risk of amputation' in the centre of our service. This decision relates to the majority of new patients entering our service because of diabetes and vascular disease complications, specifically, if NZALS can responsibly prevent an amputation it has an obvious patient benefit, as well as reducing the pressure on our bulk-funding arrangements for health services.

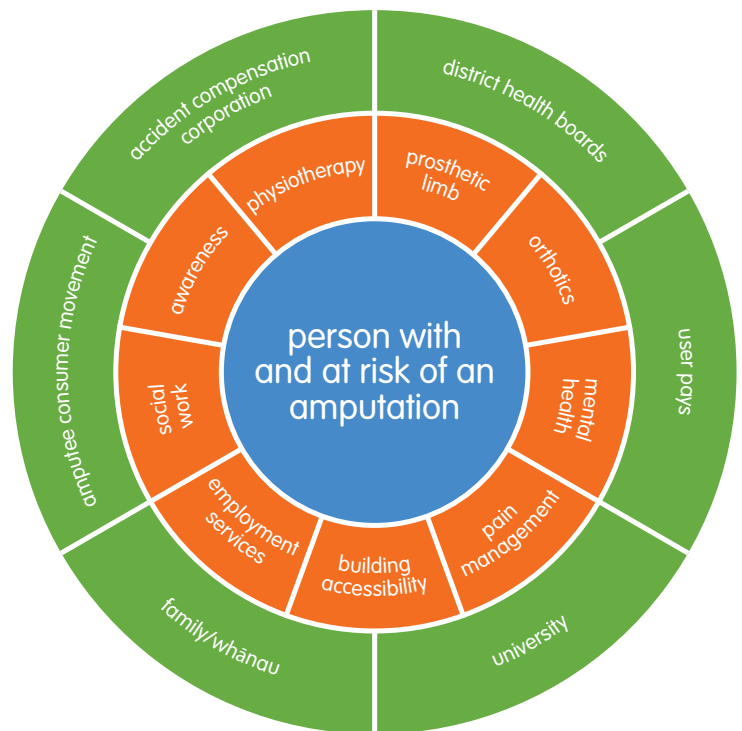
To deliver on the future service state, NZALS needs to be flexible and respond to the regional opportunities which in turn may see NZALS providing more services, collaborating with other service providers and referring patients to other services.

NZALS is expanding our orthotic service offering to win new contracts to support regional expansion so we can provide services closer to home for our patients. Specifically, if we can win this new orthotics business it will support the establishment of regional centres; these will be in addition to our current centres and regional clinics

There are endless collaboration opportunities that NZALS can improve outcomes for our patients. This means so much more than just contracted services. For example:

1. NZALS has recently developed a national relationship with Polio NZ and the Duncan Foundation. This relationship sees Late Effects of Polio patients receive consultations, assessments and care plans at clinics held at NZALS Centres and funded by the Duncan Foundation.
2. Implemented a continuous improvement programme with internal benchmarking among centres to identify opportunities to improve the service and create a competitive dynamic.

Our wrap around and patient centred efforts will evolve NZALS into a multi-faceted, holistic, and integrated wrap-around service offering and wellness hub for the people we care for and communities they live in.



## Expert workforce development

NZALS expert workforce development is critical to address the complex issues facing the service and to respond in a way that puts the patient at the centre of everything we do. Below are details of our expert workforce

NZALS Board

Chief Executive - Sean Gray

Northern  
Regional  
Manager  
Megan  
Thornley

Midland  
Regional  
Manager  
Laura  
Hillas

Central  
Regional  
Manager  
Rebecca  
Grooby

Southern  
Regional  
Manager  
Matthias  
Blattner

HR &  
Workforce  
Planning  
Manager  
Julia Kelly

Chief  
Financial  
Officer  
Jeremy  
Speight

Our team – 8 Orthopaedic Surgeons, 6 Rehabilitation Physicians, 9 Physiotherapists, 1 Occupational Therapist, 21 Clinical Prosthetist/Orthotists, 15 prosthetic/orthotic technicians, 2 Peer Support Volunteers, 8 Amputee Service Coordinators, 1 Privacy and Complaints Officer & 2 Support People

The following are examples of our expert workforce delivering on our strategy:

1. The above multidisciplinary teams cooperate, collaborate, communicate, and integrate care in teams to ensure that care is continuous and reliable.
2. In 2016, our organisation was redesigned to align the service to our strategy which led to a new leadership team and new job expectations for all staff with updated performance and reward framework.
3. We have an individualised leadership program in place which includes external mentoring, training and education, and internal capability support and mentoring from CEO, CFO and HR & Workforce Planning Manager.
4. 100% of our people across all levels of the organisation completed targeted learning to ensure we build our technical and clinical capabilities and have consistent and credible practices. This equates to 677 days of training in the 2017 financial year.
5. We have implemented a “hub and spoke” model approach, based on international best practice. For example, Hamilton being the ‘hub’ / centre of excellence for NZALS upper limb specialisation to support 20% of our patients with this amputation and Christchurch being the ‘hub’ / centre of excellence for NZALS osseointegration specialisation to support 15 patients in NZ.
6. We are an Accredited Employer with Immigration NZ.
7. We have meaningful collaborations with aligned NZ universities and institutions (including Medtech) to help improve patient outcomes and strengthen our internal capabilities.
8. Our patients have very high level (94%) trust and confidence in NZALS team. In 2017, 313 of the 328 patients independently surveyed provided trust and confidence scores between 5 and 10 (scale - 0 worst possible score and 10 best possible score).

## Diversifying funding streams

To deliver on our strategy, NZALS needs an ongoing commitment to find innovative social investment solutions and new funding streams that reduce the equity gap for individual patients and patient groups.

There is considerable profile given to social inclusion and investment among many government agencies and social investors. For example, government is always looking to maximise patient benefits and appropriate use of public monies. This approach is important to our patients because it can provide service, technology funding and educates funders and policy makers on important social issues for individuals and disability concerns in general.

Extensive international research has proven that timely and skilled rehabilitation reduces the disabling consequences associated with many acute medical conditions, chronic illness and injury, and regain active, independent and productive lives. This research supports social investment principles, for example, NZALS has built our rehabilitation capability with Rehabilitation Specialists providing NZALS clinics to our patients in all regions and our physiotherapy/ occupational therapy efforts increasing by 44% in the last 2 years. This initiative is providing greater social return on current service contracts with ACC and DHB's.

NZALS' legislative status makes it difficult for NZALS to source new and diverse revenue streams, for example:

1. There are significant legislative barriers for NZALS to access capital to invest in property and regional development considerations
2. NZALS is specifically excluded from accessing Callaghan Innovation grant programs and associated commercialisation opportunities.
3. There would be negative perceptions associated with NZALS seeking donations and sponsorship for non contracted initiatives.

New Zealand is moving towards unsustainable health and social support systems. With this in mind, there are other funding avenues, for example, Philanthropy NZ reported bequests to charities in 2014 was \$157.1m.

## Embracing technology and research

As previously mentioned, the technology and research base for our service is changing at a rapid rate. This has led NZALS to have a specific Research & Development/Technology strategic objective which is a critical contributor to our overall strategy.

We want to provide real and appropriately considered new services and technology to our patients. We consider this of immense importance as it aligns our service to the expectations of our patients. Specifically, NZALS staff need to have heard about and understand the clinical application of new services and technology as patients find things out on the internet.

To put the patient at the centre of our decisions regarding new technology and research, we need to take a view of the whole opportunity, for example:

1. NZALS made a \$1 million social investment into microprocessor knee (MPK) technology to upskill our expert workforce and provide DHB patients with MPK to improve their independence and productivity.
2. Building on the above social investment, NZALS has secured \$300k additional DHB funding per annum for patients with complex and technology needs; including 224 DHB amputees under the age of 25 and 280 DHB amputees with multiple amputation.
3. In addition, NZALS secured \$150k per annum of new funding for rehabilitation services to DHB patients. Rehabilitation improves the ability to use the prosthetic limb and maximises the DHB's prosthetic investment.
4. In the last 2 years, NZALS has developed a strong relationship with the Design School at Victoria University Wellington. It has seen NZALS co-fund and support 6 summer interns and 3 master's students researching prosthetics and design with the following benefits:
  - The students research is based on real world patient problems
  - NZALS staff participated in meaningful continuing professional development
  - The work has produced a commercially viable prosthetic cover that address cosmetic issues for patients around social inclusion and will generate NZALS export earnings.

"I am not one to wear shorts and display my prosthesis to the world but with this cover I was happy and felt empowered to wear and show this cover at the hot pools recently at Tokaanu, it was a powerful statement reflecting who I am as a Maori man and amputee." Ken



Ken on a bush walk with his prosthetic cover from the Design School, Victoria University Wellington collaboration.

# Empowering ownership

The Minister for Social Development is primarily responsible for NZALS, with the Ministry of Social Development (MSD) responsible for monitoring NZALS' performance. This model relates to NZALS' history with war veterans and the Department of Social Welfare.

Over time, the strategic fit of NZALS with the MSD has become challenging, for example:

1. MSD has a very large portfolio and is responsible for \$25b Social Welfare service, of which none of these funds are allocated for NZALS.
2. NZALS is a high technology medical device manufacturing services which integrates into a specialist rehabilitation and coordination of care service. Specifically, NZALS does not function as a MSD Social Welfare service.
3. The majority of NZALS revenue is generated through national service contracts with ACC and DHB's which require NZALS to align our service delivery, priorities and outcomes to these contracts rather than those of MSD.
4. As mentioned earlier, as a Crown owned entity, there are barriers to accessing capital to invest in the service and diversifying revenue streams to deliver on our strategy.
5. NZALS is bound by all the rules of a Crown owned entity which adds considerable compliance burden on a small organisation which NZALS is not funded for.

As part of NZALS' legislative requirement to undertake a review of our operations every five years, in September 2016, NZALS engaged PwC to consult with 32 key stakeholders and undertake a preliminary strategic review of the organisation to assess the sustainability and appropriateness of NZALS' ownership structure in the context of this new strategic direction. PwC recommended that further consideration for changes to NZALS' ownership be undertaken.

Since receiving the PwC Strategic Review, NZALS has applied careful deliberation to the outcomes of this important review, and in September 2017 engaged PwC to conduct a workshop with 24 stakeholders to confirm the need for change, identify opportunities and key considerations for any potential change. NZALS awaits the PwC executive report from this workshop and PwC have provided the following problem statement from the above works.

NZALS' approach to ownership model considerations have been conducted with full disclosure to the responsible Minister and MSD. The following is a stated deliverable in the current NZALS Statement of Performance Expectations: To continue our review of the NZALS ownership model and develop a plan to ensure the correct model is in place to deliver on our strategic objectives.



# Further information

## Statement of Intent

[www.nzals.co.nz/about-us/statement-of-intent/](http://www.nzals.co.nz/about-us/statement-of-intent/)

## Statement of Performance Expectations

[www.nzals.co.nz/about-us/statement-of-performance-expectations/](http://www.nzals.co.nz/about-us/statement-of-performance-expectations/)

## Annual Reports

[www.nzals.co.nz/about-us/annual-report/](http://www.nzals.co.nz/about-us/annual-report/)

## Website

[www.nzals.co.nz](http://www.nzals.co.nz)

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