

Who are we?

Peke Waihanga (New Zealand Artificial Limb Service) is an autonomous Crown Entity under the Crown Entities Act 2004 and exists due to the New Zealand Artificial Limb Service Act 2018. We are also required to comply with the Public Finance Act 1989.

Our Vision

Kia riro ia te mana motuhake o tōna ao, kātahi ā mātou tūrora ka whai hua.

Independent and productive lives for our patients.

Our Mission

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

Kia noho motuhake te tūrora mā te whakarato i ngā ratonga peke waihanga me te whakarauora.

We are fully funded through ACC and DHB service agreements with an operating revenue of \$35.4m and net equity of \$23.9m.

Strategic objectives

Everything we do is to improve the lives of our patients; they receive whole-of-life, world-class services that deliver what they need at each stage of their journey.

We support **equitable patient access** to technology and services based on need.

Our **expert workforce** is responsive and able to develop and innovate to continually improve the service and outcomes for patients.

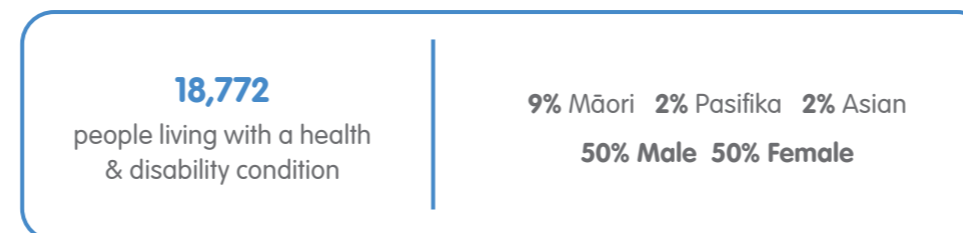
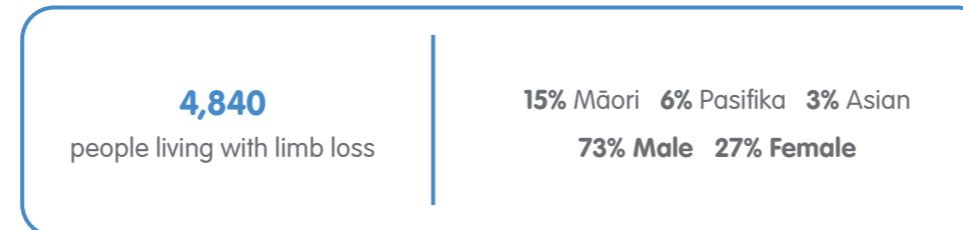
We adapt and customise technology and service models to change the lives of patients. We are responsible for understanding and accessing the best solutions and initiatives that budgets allow for our patients.

Key contacts

- **George Reedy, Chair** — appointed 1/3/2011
- **Sean Gray (CEO)** — appointed 15/1/2015, and reappointed 1/12/21

What do we do?

We care for New Zealanders living with limb loss through an integrated rehabilitation and co-ordination of care service and those with deteriorating health and disability conditions including those at risk of amputation.



Patient journey

Prevention and enabling efforts to avoid deterioration of health and disability conditions including amputation; through the provision of orthotic devices and intervention services.

Pre-amputation and post amputation support we discuss post-amputation rehabilitation and identify any psychological and/or peer supports that the patient and/or their whānau may need to help adjust to the loss of a limb.

Peer support is provided to patients by patients who have lived through a similar experience, and meet the recruitment/training requirements.

Rehabilitation and therapy interventions with early therapy interventions we ensure patients are physically prepared and supported to progress through the device assessment and fitting.

Assessments are a comprehensive process to determine the appropriateness of a device to meet an individual's functional and mobility needs.

Rehabilitation plans outline the ongoing support that will be provided to patients and updated following review appointments.

Fabrication and fitting of device to provide a custom made, high quality medical device to suit the patient's needs. We also perform Post Fitting Reviews to support patients to achieve their rehabilitation outcomes.

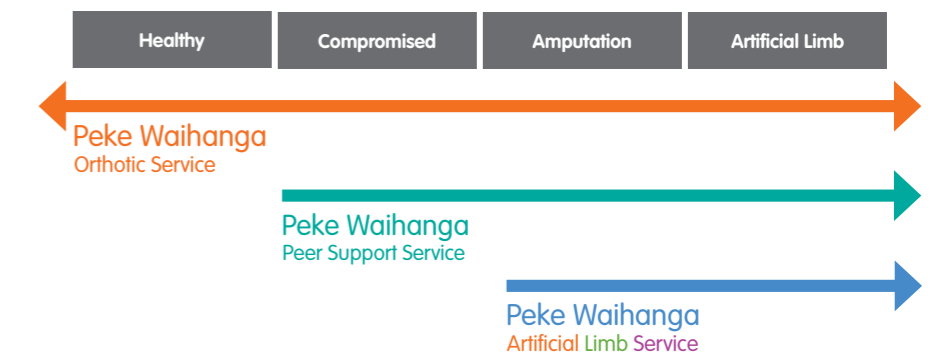
Community supports are identified and where appropriate, referrals provided to support the patient journey of rehabilitation and return to independence.

Annual follow-up to check that patients are receiving the support that they need, ensure that the patient's device is fully functioning, fits well, and resolve any issues related to their device that may have a detrimental effect on their wellbeing and/or rehabilitation.

How do we do it?

We are experts at manufacturing and providing individualised medical devices (prosthetics and orthotics) with an integrated rehabilitation and coordination of care service.

We have an expert workforce of 243, including Rehab Physicians, Orthopaedic Surgeons, General Practitioners, Prosthetist, Orthotists, Physiotherapists, Occupational Therapists, Nurses, Product Engineers, Peer Support Volunteers and Service Coordinators.



The above diagram shows an example of the continuum of care for a diabetes patient with a high risk foot through stages and our service elements which provide the following devices that are individually prescribed:

Orthotic devices² - Externally applied device used to modify the structural and functional characteristics of the neuromuscular and skeletal systems

Prosthetic devices - Externally applied device used to replace wholly or partly an absent or deficient limb segment.

Our priorities

1. Continue to evolve and improve our high quality service for the people we care for; focusing on outreach and processes.
2. To address and resolve the inequities for people living with limb loss that are created by the national Te Whatu Ora Prosthetic Service contract; not reviewed for more than 2 decades.
3. To be contracted by more Te Whatu Ora Districts for their orthotic services to support our vision and mission.
4. Embed our new innovations of Additive Manufacturing (3D printing) and Silicone Fabrication into service delivery
5. Complete the rebuild of our Christchurch Centre and replace the roof on our Auckland Centre.
6. Consult and gain approval for our Statement of Intent.
7. Update our legislation to reflect contemporary orthotic and prosthetic services.

¹ <https://www.health.govt.nz/your-health/conditions-and-treatments/diseases-and-illnesses/diabetes>

² As per the New Zealand Artificial Limb Service 2018 Act, orthotic devices and services are considered 'similar devices'.

Operational Considerations

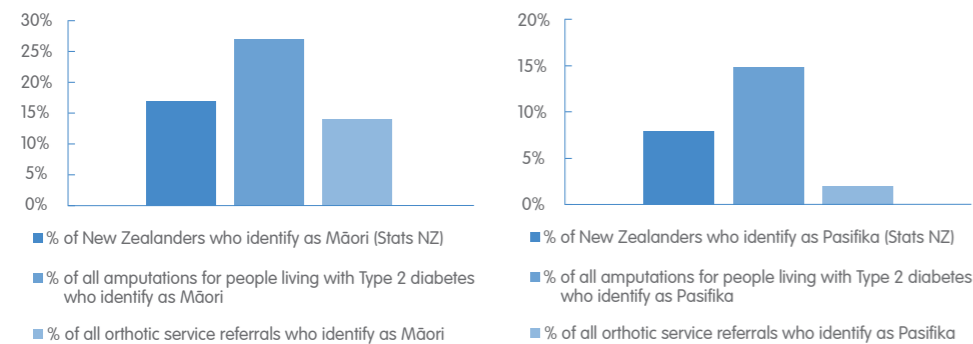
Prosthetic inequity

Our two different prosthetics service contracts drive an inequity in funding for amputees in New Zealand.

The average spend per amputee during 2021–2022 was \$4,070 for Te Whatu Ora and \$8,724 for ACC. Specifically, Te Whatu Ora funded amputees receive 47% less funding for access to critical devices and services compared to patients funded by ACC.

During this period and included in the Te Whatu Ora average, we provided a \$454,000 contribution from retained earnings to ensure a minimum safe level of service for Te Whatu Ora referrals.

Relative amputations & orthotic needs for Māori & Pasifika



The above graphs show Māori and Pasifika peoples living with type 2 diabetes are 1.5 to 1.8 times more likely to have an amputation

The above graphs also show Māori and Pasifika peoples are 18% and 75% respectively less likely to access orthotic services as part of their own high risk foot needs.

Orthotic service demand

Our Statement of Expectations over the last six years has required us to proactively seek orthotic service contracts with District Health Boards.

This has seen us contracted for orthotic services with Auckland, Bay of Plenty, Counties Manukau, Tairāwhiti, Waitemata, Waikato, and West Coast districts.

There is significant and increasing demand for orthotics services in all districts of New Zealand.

Health and disability reforms

We are supportive and aligning our efforts to the new health and disability reforms.

Peke Waihanga infrastructure

To match the increasing demand for our services, we have needed to improve our facilities and digital capability and capacity. It is expected over the next three years we will need to invest an estimated \$6 million to support service innovation e.g. new facilities for new service contracts, mobile workshops to take services into the community, and patient management systems to improve clinical efficiency and utilisation of our scarce expert workforce.

Over the last two years, we have received \$6 million to rebuild our Christchurch Centre with a planned completion March 2023 and replace the roof on our Auckland Centre which has been delayed due to COVID-19 with a planned completion end of 2023.

We have a current budget bid request in for \$1.54 million to recover legal and COVID-19 disruption costs, and for the implementation of a new patient management system.



Succession and retention / tertiary qualifications

The orthotic and prosthetic profession is self regulated and there are no tertiary qualifications in New Zealand. Additionally, there is considerable international competition for the people we want to recruit and retain.

Legal challenge

We operate in the competitive rehabilitation sector. Our operating revenues are derived from service contracts with ACC and Te Whatu Ora.

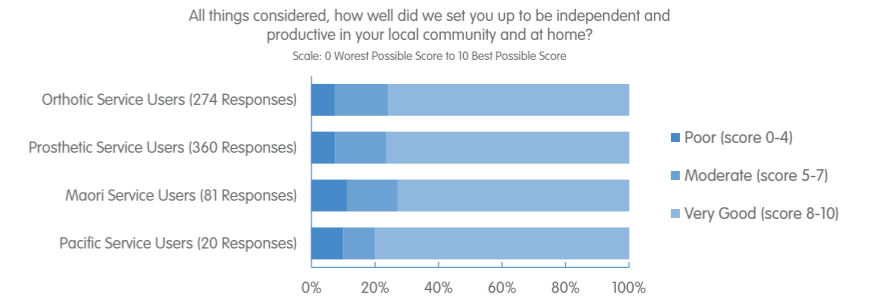
In recent times, a competitor has challenged our legislative ability to provide orthotic services in the High Court. The High Court found in our favour and ordered the unsuccessful party to pay costs.

The competitor has now taken this matter to the Court of Appeal.

Ownership structure

There has been ongoing discussion around our structure as we provide contracted services to ACC and Health clients who are not directly MSD clients and the contracted nature of our revenues are inconsistent with machinery of government and autonomous Crown Entities.

Impact examples



The above presents data from our independent and anonymous continuous improvement programme. It shows that we have equivalent and high independent and productive lives outcomes across our prosthetic and orthotic service, and our Māori and Pasifika service users.

Our Peer Support Service is offered to all amputees referred for prosthetic services; 75% of these amputees take up peer support. These services users report a 4.5 out of 5 satisfaction rating for the service they received. Additionally, we have expanded this service to those at risk of amputation. This service is a wellbeing initiative to support these patients on their care journey.

Over 172 above knee amputees now use a Microprocessor Knee in their prosthesis. The introduction of this device innovation has seen a 110% improvement in these patients achieving their goals, and a 30% and 85% reduction Numerical Pain Rating Score and Self-reported Falls respectively.

We have invested in facilities, software and workforce development to bring the benefits of 3D printed and silicone devices to our service users. There are now 900 amputees using these devices and initial data from 51 amputees is showing a 17% improvement in the comfort of their device.

When we were awarded orthotic service contracts in Auckland, Bay of Plenty, Counties Manukau and Waitemata, we inherited an estimated waitlist of 1,700 patients with approximately 50% having 'Priority 1' needs. Within six months of standing this service up we had eliminated the waitlist. Referrals are acknowledged with two working days with 11 working day average length of time from referral to receiving first appointment.

Case Study — A patient presented to Peke Waihanga for a pre amputation consultation. This patient worked with our clinical team which led to the decision not to amputate the patient's limb, instead they were prescribed and fitted with a custom ankle foot orthosis (AFO), insole and shoe. This orthotic intervention avoided the surgical/hospital \$40,000 cost related to amputation and achieve an improvement in patient mobility and a reduction in pain. **See photos below of the before and after orthotic intervention.**

We have purchased a mobile workshop which is currently being built. It will go to and collaborate with our Māori and Pasifika communities in the Northern and Midland regions. This will allow us to do local fabrication and repairs to the patients orthotic and/or prosthetic devices in the mobile workshop and provide clinical services in familiar locations that are culturally appropriate and closer to home.



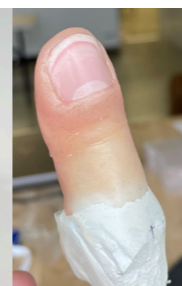
3D Printed Kayak Arm



Hydro dipped 3D Printed Arm with Robotic Hand



Soft Silicone Upper Extremity Kids Socket



Silicone Finger



Amputees participating in our give it a go golf day



Before — orthotic



After — orthotic that prevented amputation