

Who are we?

Peke Waihanga (New Zealand Artificial Limb Service) is an autonomous Crown Entity under the Crown Entities Act 2004. It operates under the New Zealand Artificial Limb Service Act 2018. We are also required to comply with the Public Finance Act 1989 and **align efforts to the Pae Ora (Healthy Futures) Act 2022**.

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

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

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

We are funded through the Accident Compensation Corporation (ACC) and Te Whatu Ora service agreements with an operating revenue of \$35.9m and net equity of \$24.0m.

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 services and outcomes for patients.

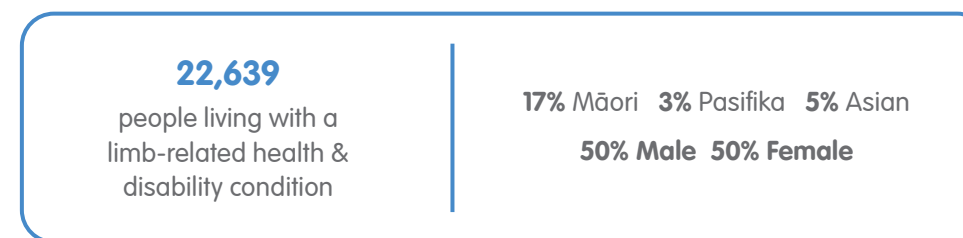
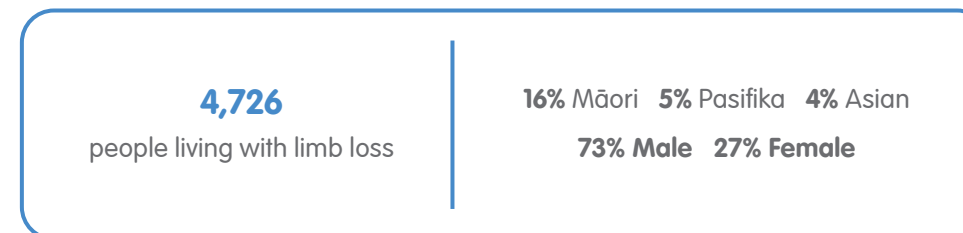
We adapt and customise **technology**, and use **research and development** to change the lives of patients. We are responsible for understanding and accessing the best solutions and initiatives that budgets allow for our patients.

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. In the 2022-2023 financial year, we are seeing:



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 our recruitment/training requirements.

Rehabilitation and therapy interventions - with early therapy interventions we ensure patients are physically prepared and supported to progress through 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 devices to provide custom made, high quality medical devices to suit patients' needs. We also perform Post Fitting Reviews to support patients to achieve their rehabilitation outcomes.

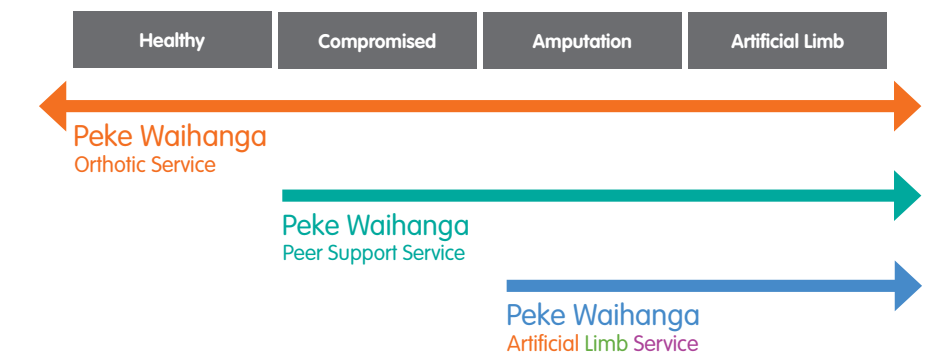
Community supports are identified and where appropriate, referrals provided to support the patient journey of rehabilitation and return to independence.

Annual follow-ups to check that patients are receiving the support that they need, ensure that their devices are fully functioning, fit well, and resolve any issues related to their devices 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 274 including Rehab Physicians, Orthopaedic Surgeons, General Practitioners, Prosthetists, Orthotists, Podiatrists, 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 of severity and our responding service elements which provide the following individually prescribed devices:

Orthotic devices¹ - 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 process improvements.
2. Negotiate with Te Whatu Ora for a new prosthetic service agreement that is safe and reflective of amputee needs.
3. Work with ACC and Te Whatu Ora to achieve Allied, Scientific & Technical Pay Equity Settlement pass through benefits to relevant staff.
4. Embed our innovations into a product development and commercialisation function (includes 3D printing and HTV silicone).
5. Replace the roof and add a second story on our Auckland Artificial Limb Centre.
6. Design and fit out a facility to meet long term orthotic service needs in Auckland for Te Whatu Ora and ACC clients.
7. Consult and gain approval for our Statement of Intent.
8. Work with responsible ministers to update our legislation to reflect contemporary orthotic and prosthetic services.

¹ As per the New Zealand Artificial Limb Service 2018 Act, orthotic devices and services are considered 'similar devices'.

² <https://www.health.govt.nz/your-health/conditions-and-treatments/diseases-and-illnesses/diabetes>

Operational Considerations

Prosthetic service health and safety risk

Having two different national prosthetic contracts presents significant health and safety risks. For the ACC artificial limb service, amputees receive an optimised prosthetic prescription and rehabilitation plan, while the Te Whatu Ora prosthetic service is bulk-funded and increasingly underfunded i.e. Te Whatu Ora funding has not increased despite the increase in amputees and the complexity of their care. This situation imposes suboptimal outcomes for patients and ongoing stress for staff. For example:

1. Increased risk of patient falls when optimal devices cannot be prescribed due to funding limitations. This can result in injuries, immobility, and mental health issues, necessitating rehabilitation services.
2. Absence of annual reviews and rehabilitation due to funding constraints can lead to device failure, ill-fitting devices, and physical or mental health issues.
3. Employee mental health is at risk, necessitating regular team meetings, communication of organisational efforts to address disparities and access to EAP services.

Changes in 5 year average amputation rates

Population per 100,000	Māori male	Non-Māori male
2013	31	21
2021	46	26
% Increase	47%	23%

This table shows the 5-year moving average amputations per 100,000 Māori and non-Māori males living with type 2 diabetes². It shows Māori males living with type 2 diabetes:

- Are increasing in Aotearoa at twice the rate of non-Māori males.
- Compared to Non-Māori, are 1.7 times more likely to have amputation in 2021 (20% increase from 2013).

These increases along with those other patients living with type 2 diabetes, have increased the demand for our orthotic and prosthetic service both in volume and increased complexity of these patients' needs.

Orthotic service demand

Our Statement of Expectations over the last six years required us to proactively seek orthotic service contracts with Te Whatu Ora. This resulted in contracted orthotic services with Auckland, Bay of Plenty, Counties Manukau, Tairāwhiti, Waitemata, Waikato, and West Coast districts. We will start providing orthotic services in Canterbury from December 2023.

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

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 which was completed in March 2023 and replace the roof in our Auckland Centre.

We are currently implementing a new patient management and finance solution. This will provide improved real-time insights and improve the cyber security and privacy of our patient management system.



Workforce

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.

Recently, Te Whatu Ora settled their Pay Equity with their Allied, Scientific & Technical, and Administration and Clerical Employee workforce. This has a direct impact on our workforce who expect pass through benefits which could be up to \$2m per annum of additional salary costs and one-off payment.

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 private sector entity has mounted a challenge to our legislated ability to provide orthotic services. The entity has now taken this matter to the Court of Appeal.

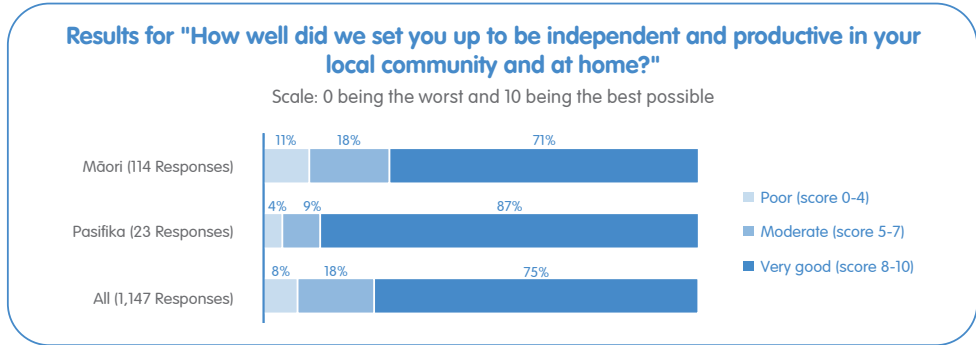
Ownership structure

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

Health and disability reforms

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

Impact examples



The above presents data from our independent and anonymous continuous improvement feedback programme over the last 24 months. It shows a high level of satisfaction across all our prosthetic and orthotic services by patients (including Māori and Pasifika) in helping them lead independent and productive lives.

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 in Numerical Pain Rating Scores 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 shows a 17% improvement in the comfort of their device.

When we were awarded orthotic service contracts in Auckland, Bay of Plenty, Counties Manukau and Waitematā, 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 within two working days with an 11 working day average length of time from referral to receiving a 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 achieved an improvement in patient mobility and a reduction in pain.

See photos below of the before and after orthotic intervention.

We have fitted out a **mobile workshop** which, in collaboration with our Māori and Pasifika communities, will provide patients in the Northern and Midland regions easier access to our services. It allows us to do on-the-spot fabrication and repairs to patients orthotic and/or prosthetic devices and provide clinical services in familiar locations that are culturally appropriate and closer to home. Its first regional clinic scheduled in collaboration with the Ngāti Hine Trust is in November 2023.



Mobile workshop — in use

The new Christchurch Centre — its opening event and patient prosthesis alteration process

Amputees participating in our Peke Waihanga organised events — including the Have a Go Golf & Archery days

Before — orthotic intervention

After — orthosis that prevented amputation