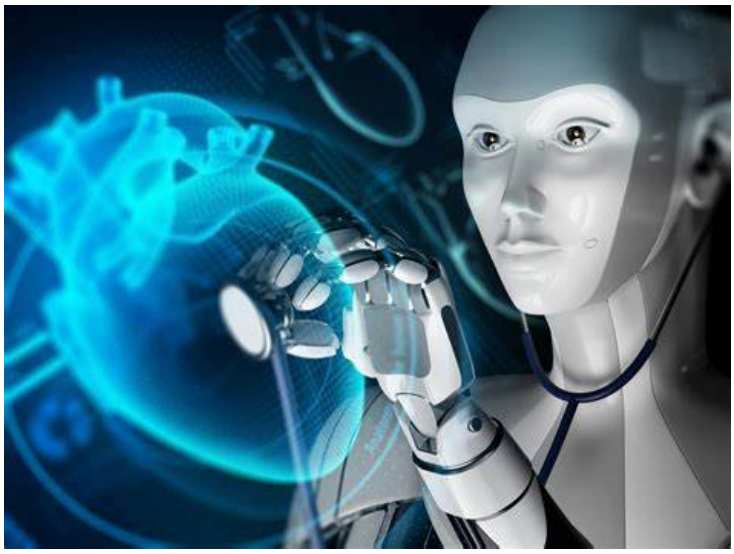
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New Zealand MedTech Guns for Global Reach

February 1, 2024 | Analysis | By Ayesha Siddiqui

New Zealand's medical technology industry is experiencing rapid growth. In 2022, the Technology Investment Network (TIN) reported that 17 MedTech companies ranked among the country's top 200 technology firms. A mix of established and emerging innovators is addressing challenging issues, from innovative surgical techniques to AI-driven micro-implantable devices. This transformation is fuelled by substantial support from both the government and private sector. Let's delve into the details of New Zealand's thriving MedTech ecosystem.



From a burgeoning industry with a handful of homegrown companies to a powerhouse boasting over 200 players, the New Zealand MedTech sector is booming and the sector is worth around $2.1 billion, according to Uniservices.

New Zealand aims to be the leader in the MedTech space and has announced various initiatives and programmes to that extent.

“The New Zealand Government supports and invests in a range of projects, partnerships and programmes across the science, innovation and technology system,” said **Danette Olsen, General Manager Science System Investment and Performance, Ministry of Business, Innovation and Employment (MBIE), New Zealand.**

MedTech-iQ Aotearoa, a national innovation collaboration, aims to accelerate the success of the New Zealand MedTech sector. It's a ‘world-first’ initiative targetting the $815 billion global medical device and digital health market. This virtual hub, linked to physical hubs in Auckland, Wellington, Christchurch, and Dunedin, employs a strategic, country-wide approach to enhance New Zealand's economic and physical health outcomes through MedTech collaboration and innovation. Deloitte Access Economics estimates a $1.5 billion increase in NZ's GDP by 2050 through MedTech-iQ.

In October 2021, the government announced an investment of $8.1 million over three years in Te TÃ?Â«toki Mataora, the MedTech Research Translator. The 18-month-old (as of April 2023) programme has already awarded $2.27 million in early seed funding to 40 projects nationwide.

“Government-funded MedTech initiatives include the Te TÃ?Â«toki Mataora (TTM) MedTech Research Translator, which is hosted by the Auckland Bioengineering Institute (ABI) on behalf of the Consortium for Medical Device Technologies – a collaborative partnership between the University of Auckland, University of Otago, University of Canterbury and Callaghan Innovation. This deep tech research translator focuses on the translation of research that addresses healthcare needs and improves the equity of access to care and outcomes,” said Danette Olsen.

In December 2023, Callaghan Innovation introduced the inaugural Ã?â?¬rohia Innovation Trailblazer Grant. Among the eight recipients, three are from the MedTech sector – Wellumio, Alimetry, and Kitea Health. These grants support non R&D activities to advance the commercialisation of world-leading technologies, aiming to transform New Zealand's innovation ecosystem.

“Government agency Callaghan Innovation runs an ecosystem-wide commercialisation hub, which delivers a range of products and programmes to accelerate the commercialisation of HealthTech and emerging HealthTech companies in New Zealand. The HealthTech Activator provides access to support, capability building resources and experienced advisors to help de-risk the early stage commercialisation journey of HealthTech businesses irrespective of their origin (i.e. entrepreneur established, formed via a research or university pathway or from a clinical setting). Callaghan Innovation also operates the Deep Tech Incubator programme, under which three out of four partners invest into med or biotech startups,” said Danette Olsen.

In addition to these specific healthtech investments, Danette Olsen further said that the government also invests in health research and development through the Research and Development Tax Incentive, and contestable funds such as Endeavour, which encourage researchers to consider a diverse range of ideas and conduct excellent research, with transformational potential across a range of sectors.

The Endeavour Fund supported the MARS Programme, which developed a spectral molecular scanner capable of producing 3D colour images of objects inside the body, including bone, soft tissue, and artificial joints. Additionally, another project under the Endeavour Fund explored the feasibility of utilising portable nuclear magnetic resonance (NMR) sensor technology to detect strokes and diagnose brain injuries.

ABI has also been allocated $15 million in government funding over five years to support a world-leading project to develop a clinically-oriented framework for mathematically modelling the physiological systems of the human body, known as 12 Labours.

“I think the really big opportunity for NZ lies with virtual human twins, where we use integrative physics-based models of the entire body to interpret data from a wide variety of monitoring devices. We are working with the US and Europe, but I think we can say that NZ is leading the world in the development of personalised, clinically applicable, whole-body models based on modelling the detailed biophysics of physiological mechanisms,” said **Professor Peter Hunter, ABI, University of Auckland, New Zealand.**

ABI, a world-renowned research institution, holds a pivotal role in New Zealand's MedTech sector. The institute has successfully spun out several companies, including The Insides Company, Formus Labs, and Heart Labs.

Creating a global impact

As per the 2022 NZ-US Trade Relationship Report by the New Zealand-US Council, medical instruments claimed the fifth position among New Zealand's leading 30 exports to the US in 2020. With a value of NZ$260 million, sleep apnea machines, making up 76 per cent of total medical instruments exports, now constitute a more substantial share in New Zealand's exports to the States compared to timber or casein. Fisher and Paykel Healthcare primarily manufactures these machines, recognised as Continuous Positive Airway Pressure (CPAP) units, playing a significant role in enhancing sleep quality for consumers in the US. New Zealand companies are also actively pursuing global expansion.

In 2022, Alimetry's new test of gastric function, Gastric Alimetry, received FDA clearance, allowing millions of US patients suffering from gastric disorders to access it within three years of the company's founding. Also in 2022, Toku Eyes entered the US market with the launch of ORAiCLE, an AI platform that assesses heart risk through a retinal scan.

In the same year, The Insides Company (TIC) entered the UK and Ireland markets. A partnership with the GBUK Group to distribute the TIC chyme reinfusion device now enables patients with type-2 intestinal failure in these countries to access this innovative technology, facilitating faster re-establishment of oral feeding and providing better outcomes after surgery.

Innovative medical devices

In addition to prominent businesses like Fisher & Paykel Healthcare, MedTech Global, and Aroa Biosurgery, a cohort of startups is emerging, addressing diverse areas—from innovative surgical techniques for enhanced patient outcomes to the development of AI-driven micro-implantable devices and wearable medical solutions for gastrointestinal care etc.

New Zealand's MedTech industry is at a tipping point, leading the way in global advancements that promise benefits for both its citizens and the global MedTech sector.

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