THE FUTURE OF REHABILITATION IS HERE

ROBOFIT

OVERVIEW

We are Australia's first robot assisted therapy centre,
helping clients explore what is possible.
#neversaynever

Our mission: to contribute towards a cure for paralysis

OUR STORY

Hear from RoboFit co-founder Dan’s story as to why we never say never

MARKET

STROKE

1 every 19 min
rate of stroke occurrance

450,000
approx number of stroke survivors

37% require support
with everyday living

$6.2 billion
+$26 billion on lost wellbeing costs and premature mortality

AQUIRED BRAIN INJURY (ABI)

432,700
Australians suffered ABI
ABS 2003

20,000
children under 15 yo affected

12,000
people with ABI in 2004-5 used specialist disability services

$8-9 billion
annual cost

Australian Institute of Health and Welfare - aihw.gov.au/reports/disability/disability-australia-acquired-brain-injury/summary
Brain Injury Australia. (n.d.). The Cost of Acquired Brain Injury. Retrieved from https://www.braininjuryaustralia.org.au/abi-information/the-cost-of-acquired-brain-injury/

SPINAL CORD INJURY (SCI)

15-24 yo
most likely age of injury

80% male

20,800
Australians living with SCI

$3.7 billion
annual cost

Australian Institute of Health and Welfare - aihw.gov.au/reports/disability/disability-australia-acquired-brain-injury/summary

MULTIPLE SCLEROSIS (MS)

33,335
Australians living with MS IN 2021

30% increase
since 2017 data

$73,457
annual per person cost of a person living with MS

$2.5 billion
total costs for all people with MS in Australia

MS Australia - msaustralia.org.au/news/multiple-sclerosis-rising-and-accelerating-in-australia-new-data-shows/

CEREBRAL PALSY (CP)

34,000
living with CP in Australia

1 in 700
Australian babies diagnosed with CP

The most common
physical disability in childhood

$1.47 billion
annual cost

Cerebral Palsy Alliance -cerebralpalsy.org.au/cerebral-palsy, and cerebralpalsy.org.au/about-us/facts-and-figures/economic-costs/

THE PROBLEM

Condition	Number of NDIS participants per condition	Proportion of all NDIS participants	NDIS Participant growth per condition in past 12 months	Quarterly NDIS payment for participant group	Quarterly NDIS payment growth in past 12 months (year on year movement)	Average annual NDIS payment (based on Quarterly NDIS payment)	Average annualised payment for NDIS participant growth	Average annualised payment growth in past 12 months
Acquired Brain Injury (ABI) [1]	17,750 [1]	3% [1]	9% [1]	$621 million [1]	27% [1]	$2.484 billion	$133,600 [1]	9% [1]
Spinal Cord Injury (SCI) [1]	5,806 [1]	<1% [1]	6% [1]	$226 million [1]	27% [1]	$904 million	$145,000 [1]	11% [1]
Multiple Sclerosis (MS) [1]	10,121 [1]	2% [1]	9% [1]	$238 million [1]	12% [1]	$952 million	$90,300 [1]	12% [1]
Cerebral Palsy [1]	17,575 [1]	3% [1]	3% [1]	$633 million [1]	20% [1]	$2.532 billion	$137,700 [1]	11% [1]
Stroke [1]	8,819 [1]	1% [1]	12% [1]	$278 million [1]	41%	$1.112 billion [1]	$120,600 [1]	15% [1]
Total % of NDIS participants (as at 31 March 592,059 NDIS participants)	-	**~10%**						
Total cost	-	-	-	$1.996 billion	-	$7.992 billion	-	-
Total % quarterly cost of all NDIS participants against FY 2021/22 $28.631 Billion (not adjusted for annualised payment growth in FY22/23) [2]						**27.91%**		

1 Data Source: Participant Dashboards - NDIS https://data.ndis.gov.au/reports-and-analyses/participant-dashboards accessed 19 July 2023
2 Data source:NDIS Quarterly Report: 2022-23 Q3 Report to disability ministers for Q3 of Y10 Summary Part A https://www.ndis.gov.au/about-us/publications/quarterly-reports - 31 March 2023 accessed 19 July 2023

ABI, SCI, MS, CP and stroke currently make up 10% of all NDIS participants, but **disproportionately account for approx 30% of all funding.**

Additionally, NDIS costs to deliver services are **INCREASING**

Without individual capacity building services like RoboFit, there will be limited ability to slow down growth and **NDIS will become unsustainable**

HOW HAL WORKS

RoboFit's focus is on integerating traditional rehabilitation methods with new and emerging technologies to encourage neuroplasticity.

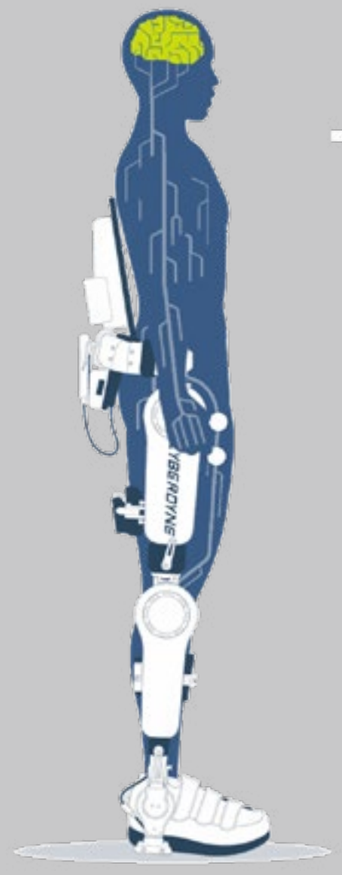
RoboFit has partnered with Japanese manufacturer Cyberdyne to bring their hybrid assistive limb (HAL) to Australia. Using Bioelectric Signals (BES) to walk with the wearer HAL is driven by the wearers intention.

3 modes available for each joint:

CVC
Cybernic Voluntary Control Mode
Assistance based on BES signals

CAC
Cybernic Autonomous Control Mode
Assistance based on previously programmed leg trajectory and gait patterns

CIC
Cybernic Impedance Control Model
Minimal assistance to allow for fluid movement of the joints



NEUROPLASTICITY

Neuroplasticity is the brains ability to form and reorganise synaptic connections, also known as brain plasticity.

This means that the brain has the ability to change and adapt as a result of an experience.

Neuroplasticity aids brain and nervous system based injuries and illnesses in recovery. It is also at the core of how we learn new skills.

TRACTION

2010 — RoboFit's co-pilot Daniel becomes C4/5 incomplete quadriplegic

2012 — Maryanne at Medica conference in Germany, learning more about rehab technology, meets Cyberdyne

2013 — First trip to Japan to trial HAL in Tsukuba

2014 — Second trip to Japan for Dan to use HAL for a longer rehabilitation session

2016 — Welcome Cyberdyne representative to Australia

2019 — Maryanne undergoes Master training for HAL for Australia and New Zealand & formalise partnership with Cyberdyne

2020

Australia's first Neuro-controlled exoskeleton is approved by TGA

2021

Hal lands in Australia, RoboFit launches and begins welcoming its first clients, operating out of iAccelerate Wollongong

2022

RoboFit moves to bigger centre in Wollongong

ROBOFIT
Wollongong

2023

RoboFit Sydney CBD opens

ROBOFIT
Sydney CBD

NOW

146
clients

16
staff members

3
clinic locations

BUSINESS MODEL

RoboFit's team aims to make the future of rehabilitation accessible today.

3 RoboFit clinics + **2 opening 2024**

CLINICS

Service based delivery model for neuro-controlled exoskeleton and goal based sessions to clients with neuro and muscular conditions

DISTRIBUTION

Direct sales of neuro-controlled exoskeleton to:
- hospitals
- aged care facilities
- rehabilitation clinics

RESEARCH

Research partnerships with universities to develop IP around neuroplasticity

CONT. DEV

Allied Health continual professionals development - level 1 in Exoskeleton Assisted Therapy

OUR IMPACT

Reduction in direct formal care supports of 4 hours per day, **equivalent to $108,000 per individual, per year.**

This not only provides the potential to reduce the direct care costs as a result of building an individual's capacity, but to also allow them to re-enter workforce etc.

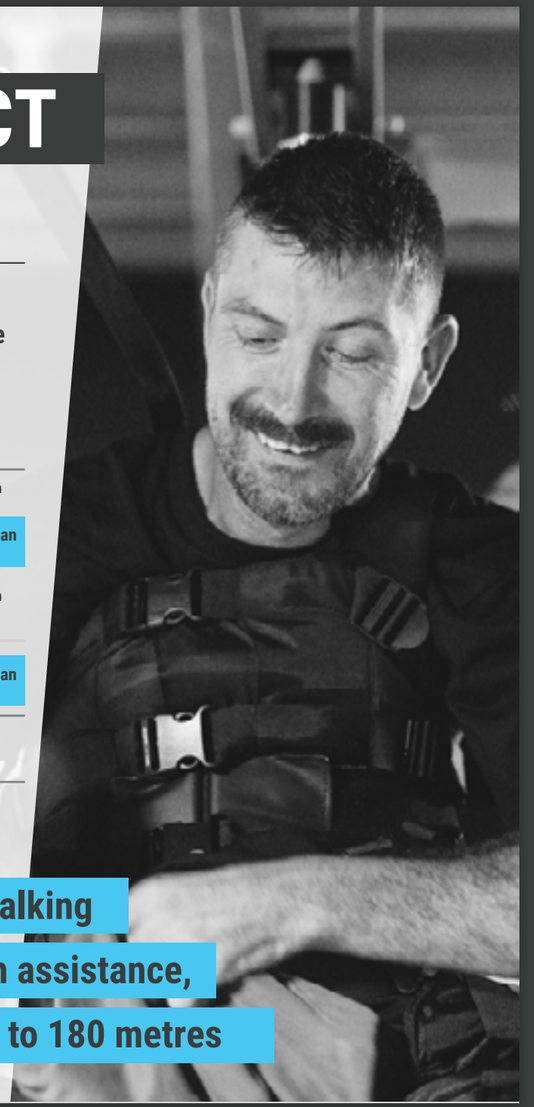
MEASURABLE IMPACT

DAN'S STATS, aged 33

Dan had a spinal cord injury in 2010. In June 2021, he began an eight week block training program at RoboFit, training five days a week. Here are his stats from this block training program:

	Baseline	Week 4 assessment	Week 8 assessment	
6 minute walk test	75.4m	150m	180m	with clinician assistance
		72.14m	77.7m	without clinician assistance
10 meter walk test	23s 19 steps	13.62s 15 steps	17.54s 17 steps	with clinician assistance
		24.96s 20 steps	29.34s 21 steps	without clinician assistance
WISCI II*	8	13	13	

*WISCI II is a tool to measure walking ability for those with a spinal cord injury, ranging from 0-20. A score of 20 represents independent ambulation.



Over a 4 week block period, Dan's 6 minute walking test distance doubled from 75m to 150m with assistance, and increased by a further 20% in week eight to 180 metres

GROWTH

<12 mths

FUTURE PROJECTS

Home based exoskeleton programs

Paediatric HAL program

CLINICS AND TEAM

Additional 2x clinics opening 2024

Staff growth to 30-35

>12 mths

9 additional locations

4 licenced hospital sites

Sub acute rehabilitation/ accomodation facility for intensive therapy

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