

# Purchase of Exoskeleton Bionic Rehabilitation Suit

**EAFRD-funded projects** 

The project made an Ekso Bionics Exoskeleton available to patients in rural areas. This enables community rehabilitation of patients recovering from spinal injuries, strokes and brain injuries.

# **IRELAND**

# ocal development

## Summary

This project enabled the No Barriers Foundation to provide an Ekso Bionics Exoskeleton for use by patients in rural areas. It allows people with neurological injuries and illnesses to rehabilitate in their own community. The suit can be moved to wherever it is needed in Donegal, simply by making an appointment. The service user is accompanied by a qualified physiotherapist at all times. The project allows the service user to avail of an affordable and self-sustaining service that otherwise would not exist. It essentially recognised a massively disadvantaged group within rural Donegal and gave them an opportunity to improve their social, physical and mental wellbeing.



# Location

Donegal

# Programming period

2014 - 2020

### **Priority**

P6 – Social inclusion & local development

### Measure

M19 – LEADER/CLLD

### Funding (EUR)

Total budget 161 380 RDP contribution 121 035 National/Regional 40 345

### Project duration

2018 - 2018

### Project promoter

No Barriers Foundation

### Contact

<u>Johnnyloughrey2000@yaho</u> <u>o.co.uk</u>

### Website

www.nobarriers.ie

# Results

As of June 2019, 15 wheelchair-using patients have access to the exoskeletor through the project's pilot scheme. A total of 90 000 steps have been taken within the rural community by the patients.

The suit was being used at full capacity (30 sessions per week) within three months of the launch of the referral scheme.

The service is now financially self-sustainable, with full-time physiotherapy staff and there is potential for further re-investment in capital.

The project has allowed the No Barriers Foundation to employ two full-time staff. Another four positions have been created for contractors.

The suit allows wheelchair users to train and rehabilitate side by side with others within the community.

**ENRD Contact Point** 

Rue de la Loi, 38 Boîte n.4 - 1040 Brussels, Belgium Tel. +32 2 801 38 00 email: info@enrd.eu website: http://enrd.ec.europa.eu/



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### Context

This project has created a template for making specialist neuro rehabilitation possible in rural Ireland. It provides a ground-breaking service to minority groups living in rural Donegal. This kind of service would not be feasible for private healthcare providers or the public Health Service Executive (HSE) to provide. The exoskeleton is one of only three accessible to the public in Ireland and one of only 300 worldwide. The project enables the No Barriers Foundation to provide this service for €50 per session. This helps to break down barriers to recovery, exercise and physical activity as well as promoting social inclusion for those living in rural locations with illness or disability.

# **Objectives**

The project set out to give people living in north-west Ireland access to an Ekso Bionic exoskeleton. This would allow them to continue to rehabilitate/exercise within their community once discharged from care. As a result they would continue to make significant health improvements and receive the care and help they need, within their rural locations. Simultaneously it would make it possible for family members to participate and help in the rehabilitation process.

### **Activities**

The No Barriers Foundation formed a number of subcommittees, including a fundraising committee with the aim of raising capital for the purchase of the exoskeleton and a service provision committee to oversee service roll out. This service provision committee included physiotherapists, occupational therapists and a local general practitioner. The Foundation fund raised 25% of the cost of the suit through local community fundraising.

The project's funding enabled the rehabilitation suit to be purchased. It also paid for Ekso Bionics to train a team of four chartered physiotherapists to provide the service in Donegal. This involved Level 1 training conducted in January 2018 and Level 2 advanced training conducted in July 2018. Administrative infrastructure was put in place

allowing all aspects of the project to operate through a cloud-based clinical management system.

A wheelchair accessible vehicle was secured to ensure ease of transport for the exoskeleton suit throughout north-west Ireland.

A media campaign was launched to raise awareness about the project and the availability of the suit to those who needed it. A GP referral scheme was agreed upon by the service provision committee with input from the Donegal GP network. A structured referral system was launched in January 2019.

# Main results

As of June 2019, 15 wheelchair-using patients have access to the exoskeleton through the project's pilot scheme. A total of 90 000 steps have been taken within the rural community by the patients.

The suit was being used at full capacity (30 sessions per week) within three months of the launch of the referral scheme.

The service is now financially self-sustainable, with full-time physiotherapy staff and there is potential for further re-investment in capital.

The project has allowed the No Barriers Foundation to employ two full-time staff. Another four positions have been created for contractors.

The suit allows wheelchair users to train and rehabilitate side by side with others within the community.

The opportunity to provide this service in Donegal was the direct result of cooperation between different bodies (community based bodies and healthcare professionals). That is the community that participated and contributed significantly to the fundraising activities of the No Barriers Committee and the funding received through DLDC. Without either this would not have been possible.

This is the first project of its kind launched in Ireland. It can be used as a template for further projects. The No Barriers Foundation staff believe that it can be replicated with the right team in place, the support of communities, and sufficient funding.

