Rehabilitation Robot: Market Research Sample

2019-2025

WinterGreen Research, Inc.

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WinterGreen Research Global Market Intelligence Company

WinterGreen Research is a global market intelligence company covering software and technology sectors with a concentration on providing high quality forecasting and concise trend analysis contained in chapter two of the study. These forecasts and market shares are backed by a comprehensive view of the market sector that provides a complete snapshot of what is happening in a market segment.

WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world. WinterGreen Research is positioned to help customers facing challenges that define the modern enterprise. The increasingly global nature of markets, technology, and product positioning is a reflection of the implementation of the globally integrated enterprise. Customers trust WinterGreen Research to work alongside them to ensure the success of the participation in a particular market segment.

Senior analysts provide insight for decision makers.

Good enough research is not good enough to make decisions that involve spending hundreds of millions of dollars. WinterGreen Research senior analysts are mindful of the huge responsibility faced by corporate managers who need to build out new products and new technology. Our analysts are careful to provide a good independent assessment of the competitive challenges and to address risk reward scenarios related to a market segment in a manner that is useful to C-level executives and to senior managers.

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Summary

Worldwide Rehabilitation Robot markets are expected to achieve significant growth as robots replace much of the human work in physical therapy.

The robots are steadier, make fewer mistakes, support treatment for longer durations, and decrease the cost of rehabilitation for many conditions. The robots permit a more accurate rehabilitation routine for any specific condition than is possible with human physical therapy in many cases.

Robotics has tremendous ability to reduce disability and lead to better outcomes for patients with stroke. With the use of rehabilitation robots, patient recovery of function is able to be more substantial than what is achieved now. Whereas traditional rehabilitation with a human therapist goes on for a few weeks, people using robots are able to make continued progress in regaining functionality even years after an injury or stroke.

It is a question of cost. While insurance pays for a small amount of rehabilitation needed, generally provided by a human therapist, using a robot is far less costly process, and can be effective over the long term, even without reimbursement. Marketing has a tremendous effect in convincing people that they can achieve improvements from rehabilitation processes even after years of effort.

Rehabilitation robotics devices are used for assisting performance of sensorimotor functions. Devices help arm, hand, leg rehabilitation by supporting repetitive motion that builds neurological pathways to support use of the muscles. Development of different robotic schemes for assisting therapeutic training is innovative.

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According to Susan Eustis, principal author of the team that developed the market research study, “Robotic therapy stimulus of upper limbs provides an example of the excellent motor recovery after stroke that can be achieved using rehabilitation robots.” Lower limb systems and exoskeleton systems provide wheelchair bound patients the ability to get out of a wheelchair

Report Description: Rehabilitation Robot Market Forces

No company dominates the entire rehabilitation robot market sector. The products that work are still emerging as commercial devices. All the products that are now commercially viable are positioned to achieve significant staying power in the market long term, providing those companies that offer them with a possibility for long term leadership position in the market.

Robotic rehabilitation equipment is mostly used in rehabilitation clinical facilities. There is a huge opportunity for launching a homecare equipment market if it is done through sports clubs rather than through clinical facilities. People expect insurance to pay for medical equipment but are willing to spend bundles on sports trainer equipment for the home. Rehabilitation robots can help stroke patients years after an event, so it makes a difference if someone keeps working to improve their functioning.

Vendors will very likely have to develop a strong rehabilitation robotic market presence as these devices evolve a homecare aspect. The expense of nursing home rehabilitation has been very high, limiting the use of rehabilitation to a few weeks or months at the most.

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Rehabilitation robots realistically extend the use of automated process for rehabilitation in the home. The availability of affordable devices that improve mobility is not likely to go unnoticed by the sports clubs and the baby boomer generation, now entering the over 65 age group and seeking to maintain lifestyle.

The appeal of Rehabilitation robot devices is that they are steady and the surgery is repeatable. Rehabilitation robots are poised to replace all abdominal open and laparoscopic surgery. The ability to plan and to visualize the path to cutting is so compelling that all surgeries will need to adopt this path.

U.S. procedure growth during the nine months ended September 30, 2016, was 13%, compared with 11% for the nine months ended September 30, 2015. Year-to-date 2016 U.S. procedure growth was largely attributable to growth in general surgery procedures, most notably hernia repair and colorectal procedures as well as growth in gynecologic oncology and urologic procedures.

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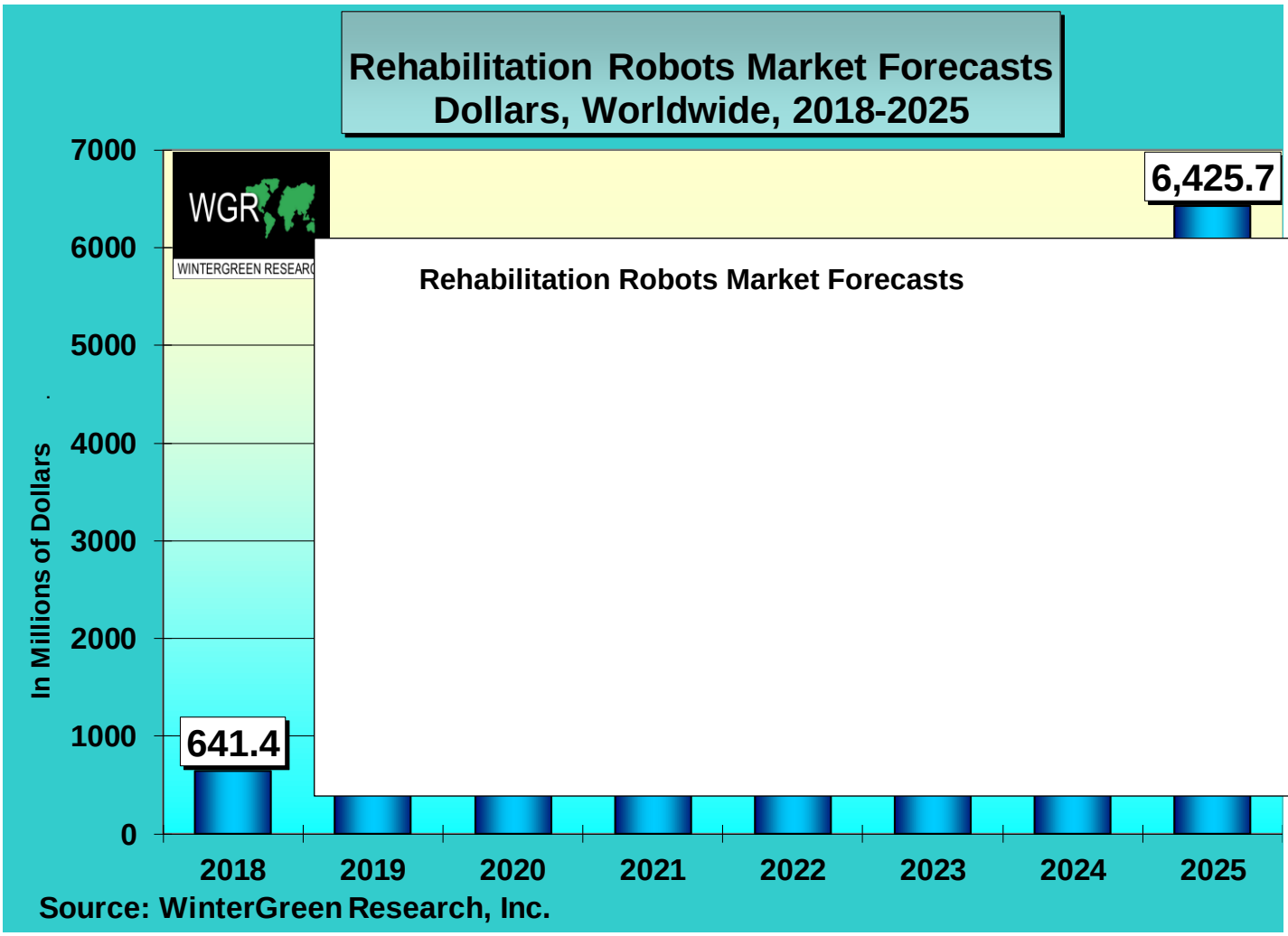
Rehabilitation Robot Market: Forecasts 2018 to 2025

Figure 46. Rehabilitation Robot Forecasts, Dollars, Worldwide, 2018-2025



Rehabilitation robots are core technology for physical therapy clinics. They use automated process to provide guidance and location information to clinicians, supporting highly refined exercise routines that do not stress any joints. They are required equipment.

Rehabilitation Robot Market Forecasts, Dollars, Worldwide, 2018-2025
In Millions of Dollars

	2018	2019	2020	2021	2022	2023	2024	2025
Total MM$	xx	xx	xx	xx	xx	xx	xx	xx
% Growth	xx	xx	xx	xx	xx	xx	xx	xx

Source: WinterGreen Research, Inc.

The technology is improving and will improve further as sensors provide feedback from the patient body through an instrument channel. Visualization will provide further improvement.

PT training is key. Leveraging integrated circuit technology is a significant aspect of making the rehabilitation robots industry more productive with better, providing more flexible visualization of patient benefits.

Rehabilitation Robot Market Forecasts, Units, Worldwide, 2018-2025
In Thousands of Units

	2018	2019	2020	2021	2022	2023	2024	2025
Units (000)	xx	xx	xx	xx	xx	xx	xx	xx
% Growth	xx	xx	xx	xx	xx	xx	xx	xx

Source: WinterGreen Research, Inc.

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Rehabilitation Robot Market Segment Forecasts,
Lower Extremities, Upper Extremities, Neurological Training, CPM
Dollars, 2018-2025
In Millions of Dollars

	2018	2019	2020	2021	2022	2023	2024	2025
Lower Extremities (MM$)	xx	xx	xx	xx	xx	xx	xx	xx
$ per Unit (000)	xx	xx	xx	xx	xx	xx	xx	xx
# Robot Units (000)	xx	xx	xx	xx	xx	xx	xx	xx
% Units	xx	xx	xx	xx	xx	xx	xx	xx
Upper Extremities (MM$)	xx	xx	xx	xx	xx	xx	xx	xx
$ per Unit (000)	xx	xx	xx	xx	xx	xx	xx	xx
# Robot Units (000)	xx	xx	xx	xx	xx	xx	xx	xx
% Units	xx	xx	xx	xx	xx	xx	xx	xx
Neurological Training (MM$)	xx	xx	xx	xx	xx	xx	xx	xx
$ per Unit (000)	xx	xx	xx	xx	xx	xx	xx	xx
# Robot Units (000)	xx	xx	xx	xx	xx	xx	xx	xx
% Units	xx	xx	xx	xx	xx	xx	xx	xx
CPM (MM$)	xx	xx	xx	xx	xx	xx	xx	xx
$ per Unit (000)	xx	xx	xx	xx	xx	xx	xx	xx
# Robot Units (000)	xx	xx	xx	xx	xx	xx	xx	xx
% Units	xx	xx	xx	xx	xx	xx	xx	xx
Total Units (000)	xx	xx	xx	xx	xx	xx	xx	xx
Total MM$	xx	xx	xx	xx	xx	xx	xx	xx
% Growth	xx	xx	xx	xx	xx	xx	xx	xx

Note: A CPM device is a machine that is used to move a joint without the patient having to exert any effort.

Source: WinterGreen Research, Inc.

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Rehabilitation Robot Market Segment Forecasts,
Lower Extremities, Upper Extremities, Neurological Training, CPM
Per Cent of Units, 2018-2025
In Percent

	2018	2019	2020	2021	2022	2023	2024	2025
Lower Extremities								
% Units	xx	xx	xx	xx	xx	xx	xx	xx
Upper Extremities								
% Units	xx	xx	xx	xx	xx	xx	xx	xx
Neurological Training								
% Units	xx	xx	xx	xx	xx	xx	xx	xx
CPM								
% Units	xx	xx	xx	xx	xx	xx	xx	xx
Total Units (000)	xx	xx	xx	xx	xx	xx	xx	xx
Total MM$	xx	xx	xx	xx	xx	xx	xx	xx
% Growth	xx	xx	xx	xx	xx	xx	xx	xx

Note: A CPM device is a machine that is used to move a joint without the patient having to exert any effort.

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Rehabilitation Robot Unit Installed Base Forecasts,
Units, Worldwide, 2018-2025
In Thousands of Units

	2018	2019	2020	2021	2022	2023	2024	2025
Rehab Robot Unit Installed Base (000)	xx	xx	xx	xx	xx	xx	xx	xx
# Rehabilitation Facilities	xx	xx	xx	xx	xx	xx	xx	xx
# Rehabilitation Facilities with Robots	xx	xx	xx	xx	xx	xx	xx	xx
Rehab Robot Unit Shipments (000)	xx	xx	xx	xx	xx	xx	xx	xx

Source: WinterGreen Research, Inc.

Rehabilitation Robot Unit Percent Robots per Facility Analysis Forecasts,
Units, Worldwide, 2018-2025
In Thousands of Units
In Percent

	2018	2019	2020	2021	2022	2023	2024	2025
# Rehabilitation Facilities with Robots	xx	xx	xx	xx	xx	xx	xx	xx
Installed Base (000)	xx	xx	xx	xx	xx	xx	xx	xx
% Robots per Facility	xx	xx	xx	xx	xx	xx	xx	xx

Source: WinterGreen Research, Inc.

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Spinal Cord Injuries Causes Number, Worldwide, 2018 In Number of SCI		
	2018 #	2018 %
Sports injuries	xx	xx
Falls	xx	xx
Vehicular	xx	xx
Violence	xx	xx
Other	xx	xx
Total #	xx	xx

Source: WinterGreen Research, Inc.

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Rehabilitation Robot Market Segment Forecasts,
Stroke, Paraplegia, Concussion, Multiple Sclerosis, and Cerebral Palsy.
Dollars, Worldwide, 2018-2025
In Millions of Dollars

	2018	2019	2020	2021	2022	2023	2024	2025
Stroke	xx	xx	xx	xx	xx	xx	xx	xx
Paraplegia	xx	xx	xx	xx	xx	xx	xx	xx
Concussion / Brain Injury	xx	xx	xx	xx	xx	xx	xx	xx
Multiple Sclerosis	xx	xx	xx	xx	xx	xx	xx	xx
Cerebral Palsy	xx	xx	xx	xx	xx	xx	xx	xx
Total MM$	xx	xx	xx	xx	xx	xx	xx	xx

Source: WinterGreen Research, Inc.

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Rehabilitation Robot Market Segment Forecasts,
Stroke, Paraplegia, Concussion, Multiple Sclerosis, and Cerebral Palsy.
Percent, Worldwide, 2018-2025
In Percent

	2018	2019	2020	2021	2022	2023	2024	2025
Stroke	xx	xx	xx	xx	xx	xx	xx	xx
Paraplegia	xx	xx	xx	xx	xx	xx	xx	xx
Concussion / Brain Injury	xx	xx	xx	xx	xx	xx	xx	xx
Multiple Sclerosis	xx	xx	xx	xx	xx	xx	xx	xx
Cerebral Palsy	xx	xx	xx	xx	xx	xx	xx	xx
Total MM$	xx	xx	xx	xx	xx	xx	xx	xx
% Growth	xx	xx	xx	xx	xx	xx	xx	xx
Total %	xx	xx	xx	xx	xx	xx	xx	xx

Source: WinterGreen Research, Inc.

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Products, Units and Dollars
Causes of SCI

Rehabilitation Robots Dollars and Units, Worldwide, 2019-2025

In Millions of Dollars, In Numbers of Units to 2025

Rehabilitation Robot Systems (MM$) Products

$ per Robot Unit ($MM)

Units Shipped

Gynecological Surgical Robot Systems (MM$)

% Growth $ Products

$ per Robot Unit ($MM)

Units Shipped

Robots (MM$)

% Growth $

Products

$ per Robot Unit ($MM)

Units Shipped

Rehabilitation Robots (MM$)

Rehabilitation Robots (Units)

Source: WinterGreen Research, Inc.

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Key Questions Answered in this Report

- What will the market size be in 2025 and what is the growth rate?

- Why is the market growing?

- What are the key Market Trends?

- What are the key growth drivers for this market?

- What are the challenges to market growth?

- Who are the key vendors in this market space?

- What are the key challenges to each vendor?

- What are the market opportunities and threats faced by the key vendors?

- What are the strengths and weaknesses of the key vendors?

The report is also available as part of our annual subscription offer. Please contact your distributor or WinterGreen Research, Inc, 781 873 5078. info@wintergreenresearch.com.

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Market Research Process

The market research process is a combination of using primary market research through interviews with users and distributors, looking at companies and vendors, taking a comprehensive look at secondary sources, and leveraging internal databases that index trends going back to 2006.

Market Research Study

There is no substitute for doing the work of understanding a market. The WinterGreen Research study is organized in a way that supports taking a look at a market from a variety of directions. There is an executive summary for those who want a quick view of the most important findings. There is a market definition and market dynamics presentation. The market shares and forecasts by segment follow in chapter two. This gives a concise presentation of the numbers and the market driving forces. Most important for really understanding the market are product descriptions in chapter 3.

The ability to compare what each company is doing to approach a market, to look at the nuance of different approaches to the same market gives product managers a concise view of alternative directions to take with a product platform.

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Competitive analysis is an essential aspect of marketing. Vendor strengths and challenges are outlined in the competitive analysis. Competitors move quickly, critical business opportunities are elucidated in the comprehensive study. The report assesses regional and local approaches to the market, technologies, competitive forces, and expected product pipeline developments. Buy the study to discover the prospects for the CBRN sector and find out what its future market prospects are.

Research Methodology

The research methodology depends on understanding the total market and by segmenting the market according to business, healthcare telemedicine, law enforcement, system and end users. Interviews with distributors and key opinion leaders are fundamental to getting good data.

The market volume and revenue for various types of telepresence systems was collected from the end users prospective, among others. In a key step of the research process, the presence of the end users in various regions was estimated and percentage of share was allocated accordingly. The ASPs were collected from various primary and secondary sources. These ASPs were used to estimate the global market by following bottom up approach. The latter data assisted in market forecast, which was again validated by various KOLs that included manufacturers, suppliers, distributors, regulatory bodies and associations.

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To Understand a Market

To understand a market, it is not sufficient to prepare a few tables that show a list of features and put check marks next to features offered by a certain company. All the features are expressed differently by each vendor, by each market participant; it is the through study of nuance, of differences in the context from chapter two market share analysis of who is leading the market and who is poised to lead the market going forward that helps key decision makers. Study of the relative feature function packages is done with pictures, text, and tables and figures.

Each study contains analysis of selected technologies that drive the market and summaries of the leading companies in a segment. See the complete table of contents on the WinterGreen Research site or available from your distributor.

We respectfully request you please buy our study and ask questions if you have them.

Susan Eustis,

President, WinterGreen Research, Inc.

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