

Ekso Bionics: Clinical Studies Prove Life-Changing Devices Help Paraplegics Walk Again



THE OBJECTIVE

Imagine being told that you will never walk again. Ekso Bionics took this worst-case prognosis as a challenge, and made it their mission to help people paralyzed by spinal cord injuries get to a different answer—that they could walk again.

The California-based company was founded in 2005 and is currently taking on the lofty—and admittedly, immensely complicated—endeavor of creating exoskeletons that help paraplegics stand up, walk, and get out of wheelchairs.

In the beginning, Ekso used Mindjet to guide the design of their product. “We needed more than a document repository; we needed a solution that helped us shine a light on potential issues and then map an execution path. Mindjet helps us choose the best design direction to balance safety, design, and schedule risks,” said Karl Gudmundsson, Ekso Bionics’ VP of Marketing.

With exoskeletons being used in physical therapy environments, Ekso has set their sights on moving it into home use. To support their efforts, they plan to partner with research clinics on extensive trials that will help prove the positive medical benefits of Ekso devices. Key to success will be designing and communicating a shared vision for joint research that also aligns with the clinic’s research agenda. With partners in place, subjects can be recruited, trials conducted, and findings can be reported.

THE SOLUTION

Gudmundsson championed the studies in May of 2012, and used Mindjet to map out the collaborative process for setting up a multi-center clinical research study across Europe. With Mindjet he was able develop discussion guides for his clinical research meetings and quickly organize the thoughts of research clinicians.



Previously Berkeley Bionics, Ekso had worked with the Department of Defense and Lockheed Martin to develop the Human Universal Load Carrier (HULC) to assist soldiers in carrying heavy loads across extended distances. This technology was adapted and refined for civilian use to create the Ekso bionic exoskeleton, which helps people with spinal and brain injuries stand and walk. Ekso is validating its value through clinical trials at rehabilitation centers across the world.

CHALLENGE

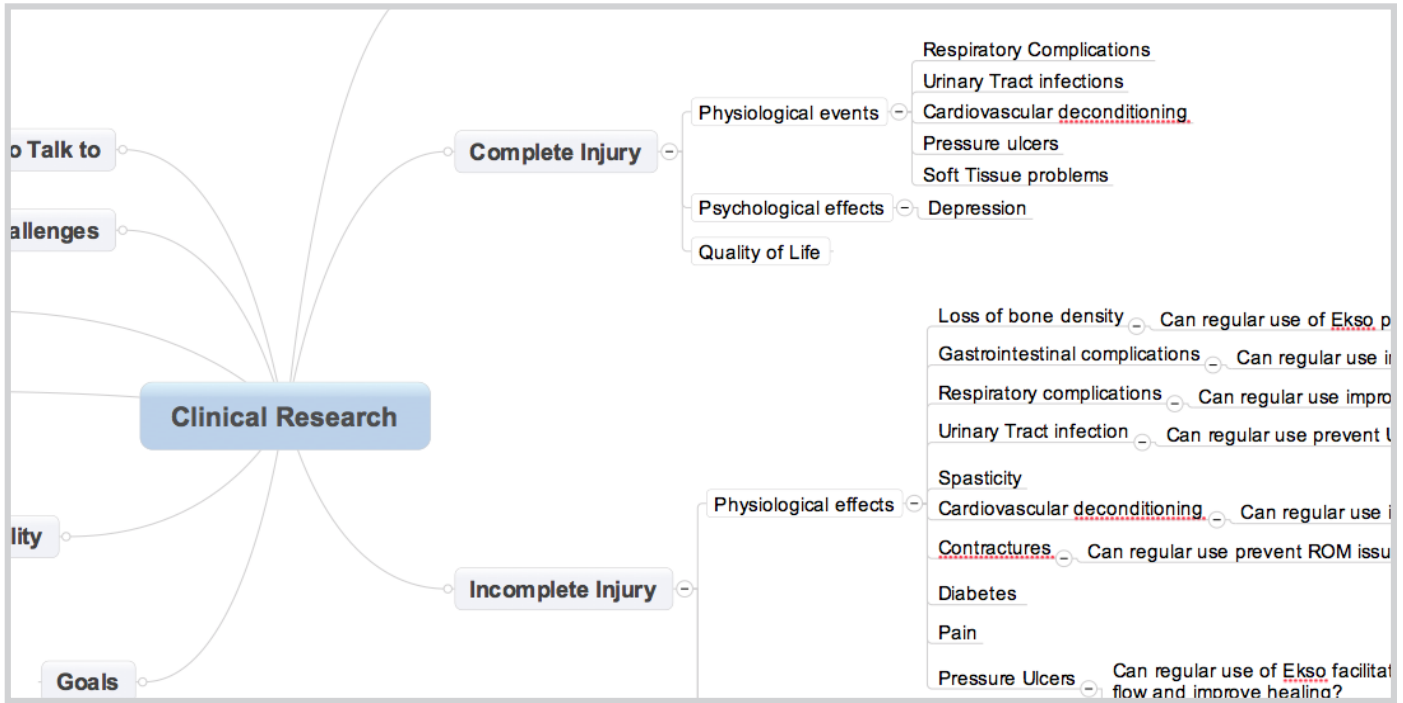
Ekso wanted to establish a research protocol that validated the medical benefits of their assistive mobility exoskeletons. To do this, they would have to collaborate with multiple hospitals and clinics to create extensive documentation and complete the trials.

SOLUTION

Ekso used Mindjet to organize research protocols, and to share information and developments to recruit rehabilitation hospitals that would conduct the clinical trials.

RESULT

Clinical trials scheduled to start in August of 2013 at ten rehabilitation centers and research hospitals throughout Europe are promising to prove Ekso’s medical benefits.



Ekso used this information to develop a 60-page research protocol that detailed the planned research. The more the hospitals line of research aligned with Ekso's goals, the more likely they were to partner with them.

"When you walk into all these hospitals . . . you have to have all this information organized. It's impossible to do in a PowerPoint format because the conversation jumps around, back and forth. So I edited a map based on the input I was getting. People could see their involvement and it helps gain their trust," said Gudmundsson.

With Mindjet, Ekso was able to collaborate on research goals with hospitals and clinics, thereby securing their participation in the important trials. With the trials in place, they have taken an important step toward proving the medical benefits of Ekso devices to the insurers that could help pay for home use.

THE RESULTS

To date over ten facilities have signed on to perform clinical trials. "When you start the scientific process, you never know where you'll end up, but at least (we have) the clarity going down this path, and we have the confidence that we can get to the end. Mindjet has been a great tool to help us see and organize the information and put it together in a plan."

“ Here at Ekso Bionics we are about improving people’s lives, and to be able to do that, you need great tools. Mindjet is one of those great tools. ”

Karl Gudmundsson, Ekso Bionics, VP of Marketing

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