TechLink

VA | U.S. Department of Veterans Affairs

CASE STUDY: HABIT CAMERA

USMC Veteran Empowers Active Home Healthcare Monitoring with VA Technology

TechLink connects U.S. businesses and entrepreneurs like Habit Camera's Derek Herrera with innovations developed in government labs. After suffering a spinal cord injury during active duty in the U.S. Marine Corps (USMC), Herrera found a new purpose helping others like him achieve a better quality of life. Herrera partnered with the U.S. Department of Veteran's Affairs (VA) Technology Transfer Program to advance a VA invention into Habit Camera, a purpose-built wireless camera for daily skin inspection. What was once a novel idea conceptualized in a VA medical center is now accessible to veterans and civilians alike, thanks to a research and development (R&D) alliance made possible by technology transfer.

"The inventor of the exoskeleton was in a wheelchair like me. Seeing his success inspired my own journey of leveraging my experience as a patient to solve problems for people with similar injuries," Herrera said.

From Active Duty to Entrepreneur

As a USMC Captain, Derek Herrera was stationed in Afghanistan in 2012 when he was paralyzed in the line of duty. Herrera spent time recovering in a VA hospital in Tampa, Florida, where he learned about his injury, treatment options, and new technology that could improve his quality of life. He was the first person to receive a newly released robotic exoskeleton that could help him stand and walk.

Herrera's experience with innovative medical devices during his own recovery ignited a passion to help others with limited sensation.

Discovering Life-Changing VA Research

During his recovery, Herrera visited the VA's Minneapolis Adaptive Design and Engineering Program where engineers and clinicians work together to solve problems for veterans. While there, he saw a prototype of a digital tool for skin inspection and recognized the value it could bring to patients who have limited sensation or are at risk for skin issues in hard-to-see areas like the feet, back and buttocks.

Herrera's entrepreneurial spirit lead him down a new path in the medical device industry with the help of VA-patented technology. The VA is one of the nation's health research leaders focused on enhancing the well-being of veterans and the nation through discovery and innovation. Herrera worked with TechLink to navigate licensing the VA patent through the VA's Technology Transfer Program (VATTP).

"The VA has a different incentive to license their inventions, and the process is simple. I highly recommend it."

"Working with the team at the VA to license technology is different than licensing technology from university research institutions like Harvard, MIT or Stanford," Herrera said.

The VATTP's mission is to partner with U.S. businesses to release the VA's cutting-edge healthcare solutions to market, benefitting veterans and the American public. TechLink facilitates licensing and cooperative development opportunities between the agency and U.S. businesses as the official technology transfer partner for the VA.

"TechLink assists the VA and U.S. businesses like Habit Camera to bring VA inventions to market," explained Dr. John Kaplan, Director of the VATTP. "The licensing experts on TechLink's staff understand the motivations and the requirements that need to be met to navigate a mutually beneficial agreement. Working with them gives businesses a trusted guide throughout the technology transfer process."

With TechLink's help, Herrera licensed the skin inspection tool for commercialization. He launched the medical device startup Habit Camera in January 2021 to evolve the VA prototype from proof of concept. The result? A well-designed consumer product that helps both veterans and Americans who struggle with limited mobility.

A Simple Idea, A Profound Impact

"When I originally saw the prototype that would become the Habit Camera, it didn't click for me," Herrera said of his first impression of the VA technology. "Over time I realized that despite its simplicity, it can be meaningful for a lot of people like me who are at risk of pressure ulcers — a potentially deadly condition."

The Habit Camera is a wireless digital camera with a telescoping handle and flexible gooseneck construction that allows users to comfortably view their skin on their phone or tablet screen. The camera records and takes photographs of hard-to-see areas of the body that can be shared with healthcare providers to quickly identify any problems and accelerate treatment.

"Imagine you have a mirror to inspect your skin," Herrera said. "You're doing an awkward yoga pose to look at something. After you see it, you call your healthcare provider and describe it to them. They might ask you to come in to get a closer look. You're probably worried, you might have to take off work."

"Now imagine you have a Habit Camera. You observe your skin on your phone screen in high-definition clarity, you take pictures or record video and send those to your provider via secure messaging," Herrera explained. "The doctor can now review remotely and tell you if you should come in, saving you time and worry."

Habit Camera is designed as an early intervention tool. Anyone at risk of chronic wounds, pressure ulcers, foot ulcers, or other skin conditions can actively monitor their health at home.

"At Habit Camera, we want to make skin inspection a habit," Herrera said. "If a Habit Camera saves someone from an amputation or early identification prevents surgery for someone in a wheelchair, we've done our job."

Technology Transfer Connects Common Problems with Researched Solutions

Federal technology transfer allows U.S. businesses like Habit Camera to use federally funded research and development for commercial purposes. Inventions developed by federal research institutions like the VA can be adopted and further developed by U.S. companies to benefit our nation's industry, economy, and society.

"There are thousands of patents at any research institution that will never become a product that people can benefit from, but the process to license those inventions is relatively straightforward and doable," Herrera said.

"There is an unmet need for entrepreneurs to license and commercialize research discoveries from institutions like the VA."

By partnering with the VA, entrepreneurs like Derek Herrera can license intellectual property developed and validated by world-class researchers and clinicians to expedite research and development and get products and services to market faster. Technology transfer also minimizes risk for companies in the early stages of product development by streamlining decision-making resources to advance the best solutions.

Interested in developing world-class technology from a federal lab? Browse thousands of VA and other federally developed inventions available for technology transfer on TechLink's Technology Marketplace.

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