

Student Innovators Give the Walker a Fresh Spin

John Buday (University of Massachusetts, Amherst)

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Four University of Minnesota students founded the health-tech solutions company Telo to develop innovative devices for mobility-compromised people, including those with multiple sclerosis, which afflicts approximately 2.8 million people worldwide (https://www.nationalmssociety.org/About-the-Society/News/Updated-Atlas-of-MS-Shows-Over-2-8-million-People). Their first device: a rollator walker that breaks with decades of neglectful design, incorporates smart phone technology, and will be displayed next to Fitbits rather than bedpans in stores.

Through this patent-pending design, which won Telo a \$15,000 fourth-place prize at e-Fest 2021, co-Founder and Chief Development Officer Steven Bleau and his company aim to shatter a prevalent misconception: that only the elderly need walkers. For Bleau it's personal -- His father has MS, a disease in which nerve fibers attack the immune system. It gradually weakens the connection between the brain and other parts of the body, slowing movement or, in rare cases, leading to full lower-body paralysis.

"Growing up within the MS community, going to summer camps, volunteering there, and being taught at those events, I saw pretty constantly that when you use a walker for the first time is when you show it to the world," Bleau said. "It puts you in a pretty vulnerable place. So, not only do we want to improve on the functionality of the device, but also to make it into a lifestyle device, something that's fashionable."

Telo's walker features a posture-supportive frame that puts the user at the center of the walker, bracing them from behind rather than encouraging them to slouch, and keeping them from accidentally pushing the walker away. Load cells and wheel encoders measure the speed of the user, the distance they travel, their gait patterns, and other important health metrics.

A corresponding app allows users to monitor this information on their phones and easily share it with physical therapists. The free version of the app allows

users to check their readings and daily progress. A premium subscription version, for \$5 to \$10 a month, lets them share readings with physical therapists so they can create better, more individualized programs.

To develop their walker, Bleau and his team talked with potential users, including younger people with chronic illnesses and physical therapists. "We talked to them and kind of got a good idea of their needs, wants, pains and gains of what they want this device to be," Bleau said.

Their research also helped them see the potential market for a revolutionized walker. "I think the market is overlooked for the same reason of, 'Oh, it's just the elderly, they don't need innovation like that,' Chief Financial Officer Rick Pradhan said. "Obviously, it takes a bit of an investment to get started, and compared to other medical devices, this market is pretty niche. I feel like... it's kind of overlooked because of the stigma associated with it."

Telo prioritizes close communication with the mobility-compromised community. The company maintains a constant feedback loop to refine the design and functionalities of the walker. Bleau and Chief Marketing Officer Beth Urbanski also hope to create a real-time feedback system on social media to inform their prototyping.

"Our first week, we put out some posts on Instagram, and some took off right away," Bleau said. "We didn't necessarily ask for opinions on their devices or what's working or not working, but we were just getting flooded with comments and messages."

"It was super helpful," Urbanski added. "We just got feedback that we didn't even ask for."

The \$15,000 e-Fest award has allowed Bleau to commit full-time to prototyping the walker. It also gave the team more control over the project than they would have had with traditional investors who want equity. However, Co-



Founder and Head of Strategy and Operations Morgan Kerfeld said Telo may consider traditional investors or crowdfunding to fund production before their market debut. The team will also look for untraditional retail partners.

"We really don't want to be in more standard medical supply stores," Kerfeld said. "We'd prefer to be in in more innovative spaces, like a Best Buy Health: something that's more technology-driven, where the device would actually be next to something like an Apple Watch or a Fitbit versus sitting next to a bedpan." CFO Pradhan said the walker will likely cost upwards of \$1,000 given Telo's comparative value to their competitor's walkers, which often cost anywhere from \$700 to \$1,500.

While Telo's mission includes the walker, it also plans to expand beyond it and develop other innovations for the mobility impaired.



The Telo co-founders include CFO Rick Pradhan, CDO Steven Bleau, CMO Beth Urbanski and CEO Morgan Kerfeld.

EIX Startup Snapshot

The Product:

A reverse frame rollator walker that lends greater support to the user's posture and helps keep the walker from

moving ahead of them. The walker's load cells and wheel encoders enable accurate measurements of speed, distance, gait, and device reliance.

Telo's walker also has a corresponding app that allows the user to monitor their results and share with physical therapists.

Founding University:

University of Minnesota - Twin Cities

The Potential Market:

Those who suffer from multiple sclerosis (MS) or other forms of chronic illness restricting mobility. More than half of all mo bilitycompromised people are actually under 65 years old.

The Minimum Viable Product (MVP):

The team has not vet decided on their MVP, but Cofounder Steven Bleau said their choices include the full walker, the rollator's innovative posterior frame with its load cells wheel and encoders, or the app that enables sharing the health data.

Stage of Development:

The sales phase has not yet begun for Telo, with the team considering

two main options for their marketing strategy. They may use traditional investors or crowdfunding to fund production of the walker, selling mainly through their website.

Annual Sales: Not applicable.

Source of Idea:

Bleau's father struggles with mobility complications from multiple Bleau sclerosis. grew up volunteering for MS summer which camps, showed him how little the design of walkers has changed in recent decades, despite millions of people suffering from mobility complications. This inspired him to come up with a better design. Repeated conversation with the MS community about their mobility needs led Bleau and his

Traction:

Since their win at e-Fest, several companies have reached out to the Telo team conduct interviews. write articles and produce videos on their startup venture.

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Biggest Challenge:

Co-founder Bleau cited time and uncertainty surrounding the Covid-19 pandemic as the biggest challenge yet for his company.

"We didn't have certain resources available to us like shops," He said. "It was hard to schedule inperson meetings with therapists and customers to really get that good feedback, so that put as back a little bit."

How they're dealing with the challenge:

The team reworked their priorities during the pandemic, focusing initially on business planning and marketing instead of prototyping. Bleau is now working fulltime on the prototyping this summer. He recently finished the CAD of the walker, and predicts to have all the parts for a working prototype soon.

Bleau and Kerfeld think they handled the pandemic well despite challenges like scheduling physical meetings, which didn't happen until April.

"The entire company has been built online because of Covid-19, which is pretty incredible if you actually think about it," Kerfeld said.

Teammates:

CDO Steven
Bleau, CEO
Morgan Kerfeld,
CFO Rick
Pradhan, and
CMO (Chief
Marketing Officer)
Elizabeth
Urbanski.

Mentors and Advisors:

University of Minnesota, Carlson School of Management Professor John Savig is the biggest advisor to the Telo team.

Other advisors include Roy G. Wetterstrom, MBA student and CEO of Revo Brand Kristina Group; Carlson Jensen. School of Management Professor; Eli Krumholz, Director of Software and Electronics Engineering Abilitech Medical, and the following: Larry Abdo, Caryl Abdo, Mike Eull, Dewey Lane, Kelly Lucente, Joan Roisum and John Sturgess.

Resources at

The team

college that helpedginally met through a class at the University of Minnesota called Entrepreneurship in Action, where teams come up with an idea for a business and conduct the necessary research to turn it into a functioning company.

"So, the course is really about giving us connections to community members and people who could help us build up the company, specifically through our connections at the University of Minnesota," Kerfeld said.

CFO Pradhan also relied heavily on their school's library and librarians for his marketing research, and Kerfeld frequently used the Holmes Center for Entrepreneurship at the University of Minnesota, where Savig is the director.

Honors and Accollates as reached the semi-finals of the 2021 Minnesota Cup (MN Cup (https://carlsonschool.umn.edu/mn-cup)), the annual startup competition hosted by the Carlson School of Management. The team also clinched first place in the 2021 Walleye Tank in the Junior Anglers Division.

Advice for aspiring Student Entremeurs:

recommends talking to your target market, those you're seeking to serve, before deciding whether to pursue an idea for a product or startup. Knowing the problems of а community and showing empathy for them will help brainstorming good ideas.

Kerfeld and Pradhan also recommend students take advantage college resources before they graduate, as they will never again have as many resources available.

"If have you someone's email, someone you think is really impressive doing incredible work in the field that you're interested in... send them an email," Kerfeld said. "Honestly-es pecially if you have the .edu at the end of it, they're pretty likely to respond back and at least set up a coffee chat."

Pradhan has this advice: "Do your homework and know your industry." And don't feel ashamed to analyze potential profits even for a product that helps people, he adds.