

[00:00:05.060] - Christopher Prentice

Hello, I'm Christopher Prentice, Harmonic bionics. We're out of Austin, Texas. Came out of the renew robotics lab of University of Texas at Austin.

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So what we're doing is attacking the status quo in shoulder care. We'll get into the disease states that go into shoulder care, but the status quo in shoulder care is extreme labor. There's a lot of people on one patient, you have somebody who's stabilizing, somebody who's moving, and then a PhD level position that's observing and making sure the session goes well. We're bringing that to a state of an art where the clinician doesn't have the arduous nature of the session. They could really focus on what is necessary.

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We're taking the analog of the session and making it digital. We're automating it and then also bringing new capabilities to the clinician who's running the session. What's one of the big problems in care, especially in the upper extremity, is there is a large, strong demand for it. Just in the US alone, there's over 3 million new shoulder injuries every year. There's over 800,000 new strokes.

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600,000 of them need some level of upper extremity care. And then there's a multitude of chronic neurologic and musculoskeletal conditions that feed into upper extremity care. Multiple sclerosis, muscular dystrophy, ALS, Parkinson's. So that's a strong amount of patients going into this. While on the opposite side, the actual caregivers, the clinicians, are stressed as it is, there's not enough of them.

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And they have one of the highest rates of workers comp out there. It's like heavy manufacturing rates. 20% incidence of injury every year by these clinicians. It's because they're doing patient transfer all the time.

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Where do the systems go into? Well, in the United States, the majority of the upper extremity care, depending on your level of injury, is done in an inpatient rehab facility. That's a wing of a hospital with dedicated beds, a building on the hospital campus that has dedicated beds, or a nearby freestanding facility, or there's a multitude of outpatient clinics that do it as well. What I'm focused on is the 2500 comprehensive outpatient clinics, the ones that have the level of staff and the level of equipment necessary to do all of the disease states. So you have in that top of that pyramid a very large beachhead of about 3700 different facilities just in the United States, again with a lot of different patients going into them for care.

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Eventually, as we improve upon the form factor, we'll be able to also get it into skilled nursing facilities. There's over 15,000 of those and the 38,000 ortho and PT clinics, because, as I'll show you, we have a level of assessment that also brings value to the orthopedic community as well.

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Build that up, you have a beachhead market of about 2.4 billion. The greater market, when you attack it, is about a \$34 billion market. We'll go to market. You can buy the system. It's a \$240,000 system, but we're actually going to market with a subscription model.

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Robotics is a service. We have the ability to do it per session or per month. However, that works to accelerate the adoption. This is the system itself very quickly. It has multiple capabilities and capacities where it deweights you, so it's like being in the pool, so you have full control and free movement.

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It also can do pre programmed movements at any level of assistance, from zero to 100% assistance. And then we bring also a new capability called bilateral sync. And this is important from, especially post stroke victims who have the ability to move on one side of their body but not the other. They become their own control. With their good arm they control their down arm. This is important for two reasons. It's proper orthopedic movement through the proper scapulohumeral rhythm. And secondly, they're actually thinking about it and trying to move, which is very important for neuroplasticity, relearning how to move. Because post stroke, you don't have an orthopedic issue.

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You can't move your arm, but it's in your head. You got to learn how to use it. But the problem is you don't use your arm, it becomes an orthopedic issue. You get subluxation, and then you also maladapt, and you move wrong, and that hurts. So really quickly, this is in Brooks rehabilitation in Jacksonville, a very good rehabilitation center.

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This is one patient. He's about two years out from his session, so he's going to an outpatient clinic. He's shown his capacity to move. He can't get his hands above his head. We give him a bit of assistance, and now he can do a movement that he hasn't been able to do in two years and allow.

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This is very hard to do with caregivers. There'd have to be two people behind him, bringing them up, doing it properly, making sure you're moving the shoulder correctly. So we're already enabling him to recover where he hasn't been able to before.

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Again, under the hood, what are we doing? We're also digital because we are getting dynamic, vibrant data sets. If you were to look at the status quo, it's moving your arm in snapshots of holding a goniometer up, which is a protractor. That's literally what's going on. They hold it up and they take down readings and they write them down.

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That's the state of the art today. We can do a very dynamic data set. We know full range of motion in all the planes of movement. We know force generation, how much actual force the patient is using. So we can even see at points in the arc is their weakness.

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And this helps to inform the clinician and caregiver of what should be done next. Then we have a robust ability to bring out data, the data for the patient, so they're better engaged about what's going on. You can jump on a peloton and get data on what you've done, more so than a person who's going through physical therapy for their shoulder. We're going to bring that level of data to them and more. Not only that, it can be put into the EHR.

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So instead of 1520 minutes after where the caregiver clinician is writing notes and typing them into, an EHR can be ported in very easily. The robot knows exactly what was done and it has all the data for it. Very simple. Team, I've got great team members. We have been there, done that.

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So that's the thing about that. It's a team that has been with Medtech and robotics and we're delivering a product this year. We just got our FDA registration two weeks ago. So with that, we've already sold four systems. We've installed two.

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I'll have two more installed in the next few months. We have five more letters of commitment that we're now turning into PO. Since we now have FDA, we're protected under our patents. We've done two clinical pilot studies. We're in a third clinical pilot study as well with Brooks.

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So right now, very quickly out of the gate, in our first year revenues, we have 150 down. We'll be looking toward about a million this year. I'm doing a controlled commercial launch and that's what we'll be talking about for what we're asking for now, we have a 3.75 convertible note bridge round open. What that delivers is this controlled commercial launch. We'll have a cadre of accounts up to about a dozen of them that will be able to be assessed and ready to go for a series b next year for full scale launch.

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So we're bringing the win win win. We're taking care of the patient. They're getting better sessions, they're getting the repetitions that they need, they're getting engagement. The facilities are able to take care of their clinicians and caregivers better. They're getting the data that they need.

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They're able to attract the patients into their centers. And for therapists themselves, we're bringing their wisdom to the session and not necessarily their arduous labor. And, for example, one of them would have to do this. You're supposed to do 300, 400 repetitions each session. Imagine doing that for 8 hours a day.

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That's. It's ridiculous. So that's what we're trying to address.

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Thank you very much.