How to Make CPAP Mask More Comfortable Transcript

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Intro and guest introduction

All right, guys, it's time for another show. What's going on today? Hey, Jerry and Emerson, we have with us today, you know, It's another Shark Tank episode.

Shark tank? Yeah, Sharktank. We have, although this one got investment, the last SharkTank person that we had, Yuna, she just created some drama on the program.

Right, somebody dumped water? They actually created investment, which is why they're there in the first place. But we do have David Walton with us today.

He is the founder of a new company called VyUsleep. They have an AI face scanning technology that will then allow them to produce a custom CPAP mask for patients who need something that is not off the shelf from one of the major manufacturers.

So when you say custom, this is kind of like the old school way where somebody had to come in with the putty or the gel or whatever and kind form something on the patient's face and make a mask?

It's been a few minutes since we had a custom CPAP mask available on marketplace. I don't even remember what those masks were called. Do you, Emerson, do you remember any of them?

I, I dont actually, but you know what I'm curious about is, you Know, Phillips brought out a version like this. So I wonder what the difference is. You know, they had the mass selector and it kind of gave you a nice picture of what you might be able to use with a patient.

so I Wonder what The difference Is going to be. I'll have to ask him about that. Yeah, talking about mass select or we've had a couple of people that on the show that had that kind of technology, right?

So I wonder what really is the difference here. Yeah, it's funny. I don't know if you guys saw it, but the Uncle Nico out of Australia, he was playing around recently with ResMed.

Now theirs is an AI facial scanning software that's available on their website. And he is putting like a Respironics mannequin head in the camera to get the scan.

So that was a pretty funny way to use some of the new technology. But yeah, you can go to ResMed's website today and they'll do an OSA scanning of the face, not to get a mask or to Get CPAP, but just to tell you whether you're potentially you may have sleep apnea based on your anatomy.

Well, that's crazy. It is. Wow. Let's get to the show. Yeah, I was going to say that. That's interesting. So let's let get do it then. All right. Lights out.

Now a word from our sponsor, MedBridge Healthcare. Medbridge Healthcare is a leading provider of sleep lab management services and home sleep apnea testing.

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David Walton's background in dental sleep medicine

you Fisherman Pykel Solo is the world's first autofit CPAP mask. It simplifies setup with its revolutionary auto-lock technology. Simply stretch to fit, touch to adjust.

Go to fphcare.com forward slash solo. All right. Welcome, everyone, once again, to another episode of Sleep Tech Talk, the Sleep Podcast with your hosts and friends, Emerson Kerr, Robert Miller and me, Dr.

Gerald George Moneycrook. Folks, we can't thank you enough for all that's going on and all you've done for us. It's been a great, great ride. And man, so many episodes and that is all because of you.

We are able to bring out so much more content for you and sorry about the tip of the slung there. So much for, we can't thank you enough for all that you've done for us.

Thank you for the likes, for your subscriptions and most importantly all the shares. You continue to share this podcast with all your friends, all of the sleep people, people in sleep in the industry and especially the Sleep Curious trying to understand what's new out there and what is new in Sleep Technology.

With that being said, thank you all once again and a huge, huge shout out to our sponsors. A big shout-out to, our clinical sponsor as well, Sleep Review Magazine.

Please be sure to check them out. With being that said Robert, what is going on today? Hey Jerry, we've got another great episode. Today we have with us Mr.

David Walton. He is the founder of Bayou Sleep. You may recognize him. If you are a regular viewer of Shark Tank, you may have seen David as part of that program where he showcased his innovative approach to sleep solutions, impressing the audience with his passion for redefining nighttime comfort.

Now he's here to share the science behind better sleep, the lessons he has learned from his entrepreneurial journey and the practical tips to help you wake up feeling truly refreshed with a custom sleep mask.

So David, thanks for joining us today. We're happy to have you with us. Thank you, Robert. Thanks to the team. You guys are doing an amazing job and congrats on the continued success.

Awesome. So David, do you mind jumping in to tell us a little bit, how did you get into sleep medicine? Because your background isn't specifically from our world, I would say.

That's right. So I graduated from the Royal College of Surgeons in the UK, and I was actually treating patients, older patients for actually dentures and for night guards.

And then I moved to the US and was working with a dentist who was very specialized in dental sleep medicines. and learn a huge amount from him. And then we went on to form Respire Medical, which was a custom mouthpiece for sleep apnea.

That was back in 2010, so quite a while ago. We grew that company and came out with several different devices in markets across around the world. So we were here in the US and several countries in Europe.

And it was really, you know, a great experience for me. I ran that company for 15 years and then had a successful exit back in 2023. And, at that point, it wasn't a matter of, okay, what's the next problem to solve and where do you really want to, commit the, next several to a dozen years of your career with.

You know, we've been in the mouthpiece space for quite a while. It's still obviously a very important solution and it's a great therapy, but it is still quite quite the small market.

And there's reasons which we can get into with that. But CPAP is obviously still the gold standard and still a leading therapy. However, there is this compliance and patient satisfaction of okay, patients are super happy and there there some fall off there.

So then we're thinking, okay how can we solve that problem. And then I met my now partners and they've developed this technology for actually custom swim goggles.

So the way that that works is you scan your face and then a little robot goes in out and cuts a gasket to fit your eye exactly for swimming. Then for anybody who swam, you know if the swimming goggle has any kind of leakage, then it doesn't work.

It fails automatically. So they've improved this technology over the last several years and develop essentially a custom fit by automating a manufacturing process.

From swim goggles to custom CPAP masks

So we started to talk about, okay, how can we transition this from the swim goggles face into the sleep space? And with my experience in sleep and their experience, in this custom technology, that's where we kind of married the two together and came together with this, this new venture.

So that's in a nutshell a little bit about my history and then what we're planning to do with the custom made-to-measure CPAT mask. That's fantastic. Now, how in the world did you turn that part of your experience into a Shark Tank episode?

We had Yuna Kim with Sleep Reset and Insomnia Solution on the show. And it was interesting because it at least something that I wasn't familiar with, that she was actually contacted by the Show to participate.

So it wasn' that, she had applied. It was that they proactively sought her out and sought out her company. Uh, similar situation. Okay. Yeah. So my, my partners in the new venture, the team from the magic five, and they were actually invited to go onto the show.

And, you know, there's a lot of, obviously time and you're not quite sure if it's going to make it onto get picked but their show, their episode was fantastic and if anybody hasn't seen it, it was one of these episodes where every shark wants in and then Robert Hirschovic ended up wearing double what they were asking for so they was like okay well they have to go with Robert and throughout the due diligence process Mark Cuban got back in touch and was hey we want to be a part of this deal too so Robert And Mark joined the Magic Five team for the swim goggle side of things.

And that was back in 2019. I think it was actually Mark on the show said that this is not really a goggled company. It's a technology company, it's robotics company So then, you know, that's when we started to talk about, okay, how can we use this technology in the sleep space?

And as they said, the goggles space is great, but with the Sleep opportunity, its even so much bigger than Mars. It's a question for you, David. Did it immediately come to you that, hey, this makes sense regarding fitting into the sleep based on your background, or did the aha moment come because of what they were, their involvement?

Be sure to check out our clinical sponsor, Sleep Review Magazine. More details in I think it was their involvement and I swim a little bit and when I tried the goggles I was like and anybody again who's tried swimming goggles knows you kind of you go through dozens of pairs and because they all leak.

It was when i tried it i was, like wow this fit is phenomenal and also because it's custom it makes it smaller it more compact. So then I started to think okay like if we can make this on a CPAP level and have all of these these benefits then I think that this could be a real game changer.

So what we did in the very early stages is when people were scanning, well, first of all, let me back up. We wanted to validate, OK, is this even a need?

Is there a needs for a custom mask? So as people are ordering the swim goggles, we would actually scan their full face just to take the measurements of the notes.

so we do this for around 6,000 patients. Just to get the data and say, what's the variation in width and what the variations in height. And we found that actually the variation was huge.

The one factor that we didn't obviously think at the time was actually, the depth of the nose as well. So you've got these three axes that you're working with.

And when you factor in the huge variation, we're like, of course there's leakage. in masks. How can a small, medium, or large fit all of these patients that need to be treated?

Now, of course, I understand there's a lot of variations in mask, but that was really the catalyst for us to research that data and say, okay, there is a huge variation here, and if we can really make something that fits to the individual patient, we make it smaller, more comfortable, reduce the leakage.

Ultimately, try to reduce air pressure as well, which in turn can hopefully reduce some of the noise. And the stereotypical perception that people have about CPAP masks being uncomfortable, can we really change that?

And that's really our driving vision. David, you know, there have been other versions of this on the market. I think Philips had one a few years ago called Mass Selector.

You know, they incorporated a series of questions into this. When you sort of take a look at what you've developed versus what, you know it's sort predated you.

What do you, what is the difference? But you're clearly technologies let forward since mass selector came out. That was quite a few years ago. But what do feel like is really different for the clinician that did see that and is kind of comparing and contrasting in their mind right now saying what's really about this?

How the custom mask works and differs from mask selectors

Yeah, and I think I would need to make the point that the mask selectors, there are a lot out there where you can scan your face and it'll say, okay, this is the best mask, that's not what we're doing at all.

This is a truly custom made component. So the way it works is you scan you face with the app on your phone. And then that generates an image of your face.

And certainly around your nose, though, it's going to start as a nasal mask. Then it designs the mask to fit the contours of the nose. The height, the width, depth, all of those contures.

We 3D print that component and that connects to the masks. So you get a reduction in seal because it fits to your exact facial shape. So again, I don't want to be kind of a mask selector.

We're not directing people to a specific mask, we're actually making something that's truly custom to fit their face. So part of what those things did do is, I totally appreciate the customization.

One of the challenges we have in sleep is there are basically three different categories of mask. You've got the nasal pillows, the over the nose traditional mask, and then we our oral nasal full face mask How do you help the clinician determine which one of those masks might be the right one for their patient?

Yeah, so we're gonna start with just the nasal mask to start. Just from a manufacturing perspective, it was the lightest lift. So we'll start a nasal and then we move into the full face.

And we understand obviously from the research that we did in speaking with patients that you do get a lot more leakage on the whole face than you would on a nasal mask.

But because the nasals mask, we can make it super small and super compact. We feel so that'll encourage patients at least to want to try something that is as small as it can possibly be.

with also being truly custom. So starting with the nasal mask and then moving on to the full face design. David, do you see this as a potential, I assume when you go to market, it'll be an e-commerce cash purchase item for

patients.

Do you have any plans to sort of scale and maybe become an option for patience that wanna utilize their payer benefits? Yeah so we'll certainly first of all we will start off with HSA, FSA benefits and working with DME accreditation for Medicare reimbursement and then looking for more private payers but you know I understand that that's a heavy lift and it's not something to just to do straight away so it is certainly going to be a little bit more on the premium product line but certainly where we want to get to is working some of the DMEs that are out there that have been providing this some of even the e-commerce platforms out there.

But I think before we get there, we really need to prove ourselves to the market, to physicians, and ultimately to patients that a custom mask is proving the hypothesis that I mentioned earlier that we can reduce all of the leakage, the noise, reduce the size, then get to something that's benefiting the patient.

So yes, it's part of our roadmap, but certainly it is not going to be initially fully reimbursed with all the repairs. Are you at SleepTek looking for new opportunities?

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Now back to the show. Fisherman Peckel Solo is the world's first auto-fit CPAP mask. It simplifies setup with its revolutionary auto lock technology. Simply stretch to fit, touch to adjust.

Go to fphcare.com forward slash solo. I know that being a part of research groups that have developed different types of masks, all three of us, by the way, at one point worked for Phillips Respironics.

We've had some, I would say, experience in development of different type of mask and therapies. But my question for you is, there was always a lot of the research around the materials that were used in the mask themselves.

What have you found to be sort of successful and maybe that's different than what's out on the market today from a material standpoint? Yeah, so the materials are interesting because the silicons that are used for a lot of the tubing and things, that's somewhat standard.

But we're really looking to what material we can have that actually contacts the face. Now, of course, it needs to be bi-compatible product and it leads to soft and questioned.

I think there's some masks that coming out now that have some really interesting side pieces that rest against the phase. So we're continuously researching what we can do there and but having something that's silicon that soft that biocompatible is ultimately where we want to get to but because you're making it smaller it also needs to be quite stable.

Materials, FDA timeline, and patient feedback

It can't be super thin and or of course anything brittle and so material property is something we've been looking into and as we get further into the development we'll be able to finalize.

So you had also mentioned a little bit earlier when we sort of talked pre-show that you're still in the FDA approval process. And that seems to be a bit onerous these days for sleep companies in a manufacturing space.

Any timelines or expectations about when might see value sleep in marketplace? Yeah, so our target is towards the end of this year. You know, I've been through the FDA 510k process several times before with my previous company.

Obviously, the FTA is somewhat of a moving target at the moment. There's some certain changes that are happening there. So that's really out of our hands.

But the team that we have, we're working with, are very experienced in doing this. that our hope is that everything will be smooth sailing, but maybe check back in with me within another month that I might disagree with what I'm saying here.

But yeah, towards the end of the year is our goal to be in the market. David, when you've worked with some of your test situations, what have been some feedback from patients?

Because this is clearly revolutionary for a lot of patients. It puts a little control back in the hands of the patient of really having something that's made just for them, designed for, whatever way you want to say that.

What has been the feedback for patients You know, sort of, I don't know if you do net promoter scores or anything like that, but what have you done to sort measure that and to really see what that patient or customer satisfaction might look like?

Yeah, so the net promote scores are something that we're continuously doing, I think one bit of feedback that I can give is that it takes 10 seconds to explain this to a patient and they're like, I get it, done, don't need to tell me anymore.

We tell them the process, you scan your face, we then 3D print this component that meets all of the contours of your phase to custom mask, reduce the leakage.

It's a 10 second conversation and it's simple to explained, they totally get us. I think often with CPAP patients, and you guys have more experience than I do in this, that they're somewhat, they kind of have the war stories that you mentioned earlier.

You know, you've all been through it and convincing them that this is something unique, I guess, is a little bit of a challenge because they've often tried many masks.

But with something like this that they haven't seen before, and they have seen something that's custom made to measure just for them, I think patients have been very excited about it.

And as I say, it doesn't take a lot of convincing when they see the technology. So David, just to kind of draw on to what Emerson asked and what you're saying right now, could you tell us some of the stories behind that?

Particularly, how was the comfort factor versus your commercial CPAP mask versus the custom mask that you've provided? Yeah so we were actually quite surprised when we started to look at patients current masks and even just as they put it on and you can if you look around certain points of their nose you're like well there's a gap there and that doesn't really fit quite correctly so that kind of that surprised us on the initial research that we did.

The comfort factor is something that we've gone from what was essentially quite a large piece that fit around the nose to re-engineering that and coming out with it smaller and smaller, making it more compact.

So the patient doesn't feel it quite as tight on their face. Now, another piece of feedback we got from patients is that sometimes if it leaks or doesn' fit right, that they just tighten the straps up and they're just hiding them in there so it's just tighter on the face, But what we found is actually that you actually tighten it a lot less.

You don't have to pull those straps super tight. So it feels as though it just rests on the nose. It doesn't to be super-tight and compact to make sure you don' t get those leaks.

Naturally, because it's custom and it fits your nose, it can just rest there. And so you're reducing the tightness of the straps. The patients, I feel, really found that to one of one the key benefits.

Because some of them say, well, yeah, it leaks, but I just tighten it. And then you're like, Well, then what happens when you tighten? Like, Yeah, gets it gets super tight.

But I'd just deal with it like well you don't have to do that anymore. You actually have it loose just like the rest on your face there. So so there's a few, there are a couple of anecdotes that we've had, both the net promoter scores are going to be really key for us as we get into to mass producing this and making it for the tens of thousands of patients that are needing it Hey, David, one question just on a sort of a, I guess, marketplace, you know, from a marketplace standpoint.

Obviously, that you're in the US, so the the U. S. would be a target audience. But, even seeing CPAP machines available on Amazon and other parts of the world, it seemed like that this could certainly be global product for you.

Yeah, we believe that because nobody has to come in anywhere to be fitted with this. You could be on your phone in the US, or you could technically be in any country anywhere in world.

Now there's obviously regulatory things that we need to go through in each country. But yes, because you can be anywhere and scan your face from anywhere, and we can ship to anywhere.

It certainly makes it a global opportunity for us. And I think the certain markets, obviously, India and China are kind of growing markets for sleep apnea.

So that's something that we're educating ourselves on continuously. One of our positions that are on board with us was explaining how the Indian market has grown quite a lot with sleep.

Different price points maybe, but certainly that's a growing market. I'm originally from the UK, so I am passionate about expanding to the U. K. as quickly as possible because I know that they need some help there.

They don't have a huge amount of… Sleep in the US is very popular and very very well accepted by patients, but in the UK, maybe not quite as much as it needs to be.

So yeah, I'm excited for that opportunity, too. Hey, David, we need to get you connected with our good friend, Adrian Zacher, who's been on the podcast from the U. K., because he is absolutely expanding Sleep Services through the Pharmacy Network, which is a very unique channel.

We'll get your guys connected. Yeah, I actually know Adrian. Oh, good. It's a small world in the UK. All of the sleep people know each other. Fantastic.

It's interesting you said that about the UK. So one of my best friends, he actually lives and he practices in the U. K.

Market expansion and future vision

Shout out to Sanjeeva who just got his FRCGP. He just that a few weeks ago. so he was asking me, hey, what home sleep test can I use? And he sent me a whole list of recommendations.

And I was really surprised to know how little he knew about sleep. So what you're saying right now really reflects that. But without being said, we are getting really close to time.

Anything else you want to add, David, that we haven't talked about right? No, I think we've covered most of it. I mean, for people to find us, our website is valueofsleep.com.

You can find this on social channels as well. Hello at value ofsleep. com is where you can subscribe to our mailing list and kind of follow our journey and be a part of this.

It's exciting for us and exciting exciting, exciting as our partners, as investors to really bring this to market. So yeah, thank you for the opportunity to bring it to your audience too.

Hey, David, thank you so much for joining us. But before we close, I just want to ask, you know, we know this is just around the corner, the FDA piece, but what else can people see you expect from you in the future?

Yes, so we certainly aren't going to just stop with just doing just during the mask. I think what we want is the most comfortable mask in world and then build services around that.

So helping more patients get tested, get more patient's diagnosed and even like another supporting products that we can have. around sleep and not just be laser focused on the mask.

But that is what we're focused right now. We're not trying to do everything all at once. I think we all know that that's not a great strategy. So we are going to start with this amazing product and then add other services around that with regards to telehealth.

I hope sleep testing and diagnosis and maybe supporting patients throughout their whole sleep journey. So that's the long-term vision. And then we want to ultimately get to, you know, I think Dr.

Chopra said on your podcast a few weeks ago that really looking at overall healthcare savings and how can we get patients onto a therapy that is not only comfortable, but it's also successful and where can really help payers and employers bring down healthcare costs as a whole.

Lots to do, starting with this mask is where we wanna be. Well doc, thank you so much for for joining us and thank You so, much, for sharing all that and We thank our audience for, joining, us as, well be sure to check out Dr.

David Walton and by you sleep we're gonna have more information in the show notes but, we also want to say thank, you, so Much for all, that you're doing for us all the all The subscriptions all to shares as well as all the likes.

We can't thank you enough for that. A huge shout out to our sponsors. And we say until next time, lights on. All right, guys, that was quite a show out there that we had.

What did you all think? Postcals. You know, it's really fascinating when you think about just the idea of customization. we're seeing it in so many different parts of healthcare.

Here we've got a guy who's You know, we kind of imagined and we're seeing it in dentistry and sleep dentestry too, but to now bring this to the nasal interface or the sleep apnea therapy interface area is really fantastic.

It was really nice to see that. I think there's a lot of opportunity for patients that want to really take control of their healthcare. This could be one of those angles.

I agree. I just want to mention that for the first time ever, we had a four-legged visitor on the podcast in the background. So if anybody's out there and you watch the YouTube video, you'll see that there was a lady playing with a dog in background as we're interviewing David.

Made it better. That made it much better, although my ADHD was going crazy. I was going to say look squirrel, but it was a dog. But it's cool to see that they have an office mascot over there.

That was cool. Going back to customization, Emerson, you make a really good point. As we advance in healthcare, we're seeing more and more non-generic treatment modalities, whether it just forget OSA for a moment, which is what we were talking about in this case.

Any other sleep or any other aspects of medicine and healthcare, we're seeing more and more customization. So it's really cool to see this as part of it with the mask.

I'm just kind of curious where it is going to go, right? 100%. It was interesting because one of the last questions that we asked him is, where do you see this product going in the future?

And to hear him sort of take a CPAP mask and a platform and start to build on that and build out a healthcare solution, it's pretty incredible to have that kind of vision.

And he certainly has an entrepreneurial spirit to launch successful companies. So I need to know more people like that, by the way. It does make you wonder at what point, maybe this never happens, but we talk about direct consumer solutions a lot.

at what point do we start to see this become an over-the-counter type solution where someone's simply able to scan their face, scan just their whole anatomy from the clavicles up and make a determination about what their therapy should be.

It certainly seems like we're getting to that place where that customization, whether it's the interface or what it might be, is you're just a scan away from it.

You know, there certainly is with all the direct-to-consumer things that are happening in the space today, potentially for a lot of patients, it has shortened the window of timeframe from diagnosis to therapy.

And then to customize it also at the same time, that really is, I think, a differentiator from what's available today. Well, can't wait to see that happen because that will be absolutely fantastic.

Like you said, shortening that gap or even as you've said Emerson, you have that experience at the over-the-counter situation where a patient could just walk in, get scanned.

And you hear about these technologies and other things that there was a store, I believe the Levi's store in San Francisco where you could step into a tube of short and lasers will scan you and then you can get a custom pair of Levi jeans.

something just like that, but for something that you really need, like a CPAP mask, that would be absolutely amazing. Absolutely. Hey, by the way, for the audience, we're all just back from Sleep 2025 and have lots to share.

So maybe look for an episode where we come back and sort of recap what we saw and learned and what the latest and greatest is in the world of Sleep. That's a great point.

I wish everybody would have been there. I know. All right, guys, I think it's time to close it. Alright, folks, well, until next time. Cheers. Fisherman Paykel Solo is the world's first autofit CPAP mask.

It simplifies setup with its revolutionary auto lock technology. Simply stretch to fit, touch to adjust. Go to fbhcare.com forward slash solo. Before we go, we would like to thank our sponsor, MedBridge Healthcare.

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