

Transforming mental health care with AI

It was a simple online pizza order that gave clinical psychologist Noam Dishon the idea to create an app that could keep his patients better engaged with access to support in between appointments. The app — Wellifiy - is now up and running, and is helping to improve outcomes for patient accessing support for mental health.

Announcer

This is a podcast by Lumina, the perfect space to innovate, collaborate, and grow in health, science and tech. Noam Dishon, welcome to Health Tech Talks.

Host - Rebecca Griffin Noam Dishon, welcome to Health Tech Talks.

Guest - Noam Dishon Hi, Rebecca. Thanks for having us here today.

Host - Rebecca Griffin It's an absolute pleasure to be talking with you today, Noam, as the first of our three part series on business and client relationship automation. Let's start with

Wellifiy. Can you explain what it is and how this idea came about?

Guest - Noam Dishon

So at Wellifiy, we help healthcare providers create more meaningful and personalized healthcare experiences with their patients. That's at a high level. To break it down a little bit further, the background to this was I'm a clinical psychologist by background and I still work in clinic a little bit every week. Several years back I was working in two different settings. I was working in public healthcare in private practice as well. Noticed the odd reality occurring that we would often discharge patients from an admission with very little support, really. It would just be like a business card with the site triage number on the back of it, and people would often come back to the hospital or actually someone that's tragically much worse. So that was a huge problem. At the same time I was working in private practice and I still recall one afternoon I'd ordered my lunch to the clinic and I remember thinking that I've got better information on the status of my Domino's pizza than the client that I'm about to see that I've not seen in the last two weeks.

And I just thought that was ridiculous. So that was where the idea of Wellifiy was born. And so what we've done is we've built a two-sided platform. So there's a patient facing mobile app and then an interconnected clinician facing portal, and they basically work in tandem with one another to provide patients with 24/7 access to tools and resources, content that's been curated specifically for them by their care team, and then to provide the care team with much better insight into the way that people are tracking between appointments or



even post discharge. So that's the platform in a nutshell. There's few other bits and pieces to it, but I'm sure they'll come out over the course this chat.

Host - Rebecca Griffin So you had this idea while ordering your lunch and then you've created this incredible platform, but how did you do it? You're a psychologist, you're not a web developer or an app developer. How did you go about that process to bring it to life?

Guest - Noam Dishon

Yeah, it definitely was a process. I've learned a lot of stuff between having the idea and where things are today. So I basically started doing some wire frames, so this is where I started sketching out what the platform would look like. And then from there I taught myself how to develop a prototype. So this is going a little bit beyond the wire frames to actually creating a user interface essentially, and then connecting that into itself so you could click through the platform a little bit. And then with that in my pocket, I was able to go to a few different angel investors and I managed to get a little bit of funding, do start to get some developers and actually build out the back end of the platform. That was how it started, and then from there we managed to acquire some customers and we've basically been bootstrapping since, and we've grown our team and grown our customer base. But that's basically the origin of it.

Host - Rebecca Griffin What a learning curve, I imagine. Did you have any issues developing the app? And if so, can you shed any light for others looking into creating an app?

Guest - Noam Dishon

So, probably one of the early challenges was when it came to actually the development of the apps. So after I created the prototype and raised a little bit of money to get the app built, I initially engaged with a software development agency. It served its purpose at the time, to get an MVP up, but then I realized early on that it really wasn't going to be a long-term viable solution. So from there I got my own developers. Also, my co-founder, Paul, came on board and he's our CTO. So Paul, he's had a tremendous background in a whole number of really large startups. And so him coming on board and our building our internal development team was a huge development solution.

Host - Rebecca Griffin What was the timeframe between you having this idea and then launching?

Guest - Noam Dishon

It was probably about a year between the idea and getting the MVP up and running, but the distance between MVP and where the platform is today is probably orders of magnitude greater than the distance from the idea to MVP, if that makes sense.

Host - Rebecca Griffin What about testing of the product?



Guest - Noam Dishon

There's a whole process that we've got around that because obviously working in healthcare, the reliability of the platform is one of the most paramount things, alongside obviously, privacy and security and confidentiality and all those core elements. But reliability is central. So we've got a very rigorous testing process methodology that we employ internally before anything ever shifts to production.

Host - Rebecca Griffin How did you test from a client patient perspective that it would work for them and that it had what they needed?

Guest - Noam Dishon

There's a few different pieces to that. One of them is that because I still work clinically for the clients, that utilization on this platform has a clinical utility form I can introduce to them and I'm able get direct feedback and keep iterating it and improving the platform based upon that direct feedback. The other thing is that we work very closely with our customer organizations, again, to talk to them regularly, to get feedback to distill the learnings that come from that and keep iterating and improving the platform in a very agile and feedback informed manner.

Host - Rebecca Griffin So Noem, let's pivot to the topic of mental health. Thankfully it's no longer a taboo topic and rather it's becoming an important conversation to have with others. Are you seeing any trends or common denominators in mental health and how Wellifiy can help?

Guest - Noam Dishon

Yeah, I think probably over the last five to 10 years there's probably been a growing interest in starting to track patient outcomes. So I think that's significant. This is the idea of giving people self-report questionnaires before they commence a service engagement, and then during and after, to actually be able to get some sort of data on progress as we course that treatment. So that's definitely something that has increased over the last five to 10 years and hopefully will continue to, I'd probably say that is the biggest thing, but then obviously now there's other things. So we're supporting services to deliver blended care model of delivery where they can, in addition to providing the face-to-face or telehealth service that they're providing, they can also support clients in between sessions with things like different activities or access to different tools and resources.

Host - Rebecca Griffin Can you take us step-by-step through how the app streamlines patient communication and education, set and achieve goals, coordinate care plans and track process?

Guest - Noam Dishon

There a three main pillars to our platform and the functionality that we offer. So they really are situated around this idea of communication, education and



tracking. And so in terms of the communication part of it, we can support different modalities of that from text-based, in-app messaging to video calls. Well, in the context of the education part of it, there's a whole capability of the platform to allow the care teams to provide to the patients different educational resources and content. It could be PDF, audio, video-based formats. And then in terms of progress tracking part of it, this links in with what we were just touching on before about the outcome monitoring, but this is where care teams can send patients for types of assessments and questionnaires that are then repeated on a recurring basis, potentially, to track that progress over time, pulling all those things together. Then there's the ability to help get a care plan, develop goals collaboratively with the care team and cultivate a care plan that everyone, including the patient is a participant in.

Announcer

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So if I'm a patient and my psychologist uses the app, what it means in practical terms is that I can log onto the app as a patient and look at my care plan and connect with my psychologist in between appointments. Is that it in a nutshell?

Guest - Noam Dishon

Yeah, you can do those things. Could access different mindfulness tools that the psychologist has activated for video-based resources.

Host - Rebecca Griffin Putting myself in the shoes of a business owner, there is never enough time in the day and there is always so many hats to wear from accounting to following up on clients. How is AI used in this platform to assist?

Guest - Noam Dishon

All those different things that we've been talking about in terms of assessments, the content, that can be configured on a per patient basis depending on their particular needs, and we can use workflow automation to basically set that up so that the clinician doesn't have to manually activate all these things or deactivate things on an individual patient basis. We can use workflow automation capability in one click that will sort it all out for that particular patient basically.

Host - Rebecca Griffin I understand you use AI infused innovation. Can you explain more about what that is?

Guest - Noam Dishon

In addition to the workflow automation part of it, there's also some stuff that we're doing in terms of the data collection part of it. So as you know, things like mobility and sleep are really a significant piece of data for healthcare providers to be having some awareness and insight into, in terms of being able to help



catch red flags on declining patients' wellbeing. We are able to ingest that data and then using AI and machine learning, then run an analysis on it to generate predictions on changes in clients' wellbeing, basically.

Host - Rebecca Griffin

How does Wellifiy increase patient engagement and are you seeing an increase in patient results?

Guest - Noam Dishon

There's a few different ways that we support this. So to take one example, if you go to see a psychologist, often what happens is they will give you worksheets to take home and look at and complete in between meetings. Now the thing is that we know that when people do this, it can actually be tremendously helpful in terms of treatment recovery. The challenge has often been for a long time that the experience for clients is very poor because what that means that they then need to be lugging around pen and all these sheets of paper with you once that's filled out and you bring it back to the therapist and then they need to review all these different materials and make sense of it. So that's a bit cumbersome on both ends.

With that platform, the psychologist can just activate a digital version of some of these different tools. The client can do them in the app in a more private and discreet way whenever they would like. There's no paper to lug around or have left around and be vulnerable, and then the clinician can see that on their side of the platform immediately and review that at the start of a meeting with them or something like that. So that's one way that we can increase engagement as an example. And as far as improving outcomes, before that, how we can send out questionnaires to people over the course of their treatment, and so we see the data from that, seeing people when they start an engagement to when they're complete an engagement and improving.

Host - Rebecca Griffin How does the app identify early warning signs of mental health decline?

Guest - Noam Dishon

There's a couple of different ways that we support that. One is connected to that outcome monitoring piece that we would chat a little bit about. So if the patient is doing a questionnaire on a full-on basis and then the health service starts to see a decline on that, that's one pathway. The other is through some of this, the collection of the passive doubts. So things like step count. So if people are typically walking 8,000 steps a day and that reduces down to 2000 or 3000 steps, that can often be a pretty significant indicator of a change in mental state and well-being. There's other checking type of capabilities that the platform has got that can be more patient driven. But there are several ways.

Host - Rebecca Griffin So, Noam, what is a white label mental health platform and what's the benefit to other businesses in health tech?



Guest - Noam Dishon

White label platform basically just means that we take our logo and color palette and brand it off and then we can apply the healthcare services logo and color palette and branding. And we think that's important for healthcare providers to be able to offer for that type of solution to their patients.

Host - Rebecca Griffin Fantastic. Now, Wellifiy, what is your goal with your fantastic product?

Guest - Noam Dishon

Our goal is to help health services improve the digital experience that their patients navigate through and to also drive better outcomes for patients at the same times in terms of their health. And then alongside that is also to improve the lives of clinicians who are operating the services and reduce the burden of some of the tasks that could chew up time and take them away from doing the clinical work that they're actually interested in doing.

Host - Rebecca Griffin What sort of feedback are you getting from clinicians?

Guest - Noam Dishon

Feedback, it's great. We love to talk with the clinician users as well, a lot. And feedback is generally really positive around the way we've been able to streamline different processes that would otherwise be taking them a long time to manually do, and also a lot of positivity around seeing the engagement from their patients and the improving outcomes as a result.

Host - Rebecca Griffin And what about patients? What are they saying?

Guest - Noam Dishon

Similarly, the other side of that, so patients, they're typically reporting having a much more seamless experience with their healthcare provider that they can do everything in the one spot in a centralized way, just really optimizes their patient experience.

Host - Rebecca Griffin Even something as simple as when is my next appointment? Is that on the app?

Guest - Noam Dishon Yeah, yeah, absolutely. Yeah, that's all in there.

Host - Rebecca Griffin As part of this incredible journey that you've been on to create Wellifiy, you were a participant in the LuminaX HealthTech Accelerator program. How did the program influence your journey?

Guest - Noam Dishon

LuminaX was awesome. It was a really fantastic experience and I would highly recommend it to anyone else that has a thought about doing it. Just go ahead and definitely apply. It was really beneficial for us. We learned a whole lot of things from [inaudible 00:14:15] marketing and sales and financial modeling. A whole spectrum of really valuable business development type of topics and content were covered. The mentoring was amazing, so just a lot of insights that



we were able to draw through all of those workshops and consultations. And then also the regular coaching with your coach was tremendously valuable and really helped with shaping different goals that we wanted to hit over a period of time and really help keep us accountable. We definitely grew a lot through that experience.

Host - Rebecca Griffin Also, the people that you meet through these programs is exceptional.

Guest - Noam Dishon
Yeah, absolutely. I was relatively isolated in terms of engaging with other people in tech or startup space, so that was probably on par as being one of the most valuable things about the program was actually just being able to be in a bit of a community of other people doing something similar and break that sense of isolation there. And also, I'm from Melbourne, so going up to Queensland every

couple of weeks was absolutely unreal, and I loved that.

Host - Rebecca Griffin Big bonus of the program. Well, Noam, it was fabulous to have you here in Queensland for the Accelerator. Come back anytime and congratulations on your amazing creation of Wellifiy, and thank you so much for talking with us

today.

Guest - Noam Dishon Oh, thanks, Rebecca. It was a pleasure.

Host - Rebecca Griffin You are very welcome, Noam, and I hope that everybody can rejoin us for our next episode of our three-part series on business and client relationship automation when we'll be talking with Dr. Padma Gadiyar from Smilo about how

Al can benefit your business.

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