Michael Roberts (00:09):

Welcome to the Health Connective Show. I'm your host Michael Roberts, joined by our company President Scott Zeitzer and our COO Justin Bantuelle. Today we're talking to Dr. Lukasz Kowalczyk. Dr. Kowalczyk is a board certified gastroenterologist who has pivoted to focusing on healthcare data and building digital health products that deliver clinical enterprise value with his company Soothien HealthTech Advisory. We wanted to have Dr. Kowalczyk on to talk about how we can harness data in a way that is useful to physicians in a clinical setting and how AI tools can help in that regard. Dr. Kowalczyk, we're so glad to have you here. Thanks for joining us.

Dr. Lukasz Kowalczyk (00:47):

Thanks a lot. It's a real pleasure to be on. I'm really excited to talk about surgical robotic automation in the age of AI. This is just great. Thanks so much for having me on.

Michael Roberts (00:55):

I'm stoked. I'm stoked to have you here. So let's talk first, how did you get here, <laugh>, what is your background? What led you to this current career path? Like how, how did you start down this, this way?

Dr. Lukasz Kowalczyk (01:06):

Well, I think fundamentally just poor judgment overall, <laugh>,

Michael Roberts (01:10):

<laugh>

Dr. Lukasz Kowalczyk (01:12):

Not, not knowing what I didn't know was really helpful. No, I mean I, I think one of my afflictions is chronic dissatisfaction. I'm pretty sure that's a billable medical code, but I started off as a gastroenterologist and I really got involved in, in health tech from early days of my training. And it was really about like systems thinking, but there's all this information, there's a lot of standardization that we're not leveraging in just trying to work on how can you like optimize systematized care better. And I got into gastroenterology. I got into a multi-specialty group initially where I learned a lot about multidisciplinary care, uh, value-based care, which was really educational. I moved into a single specialty practice and helped build that out over the, from, we went from five partners, of which I was one, up to 40 providers over the course of five short years.

Dr. Lukasz Kowalczyk (02:08):

And that was incredible lessons learned there. We sold the practice to private equity as a private, as the platform practice in 2019. And 2019 to 2021, that dissatisfaction like hit a peak for me where I was like, we gotta do a better job of synthesizing and aggregating institutional knowledge around surgical scheduling, particularly in the GI space, right? Right barrier for automation. And so I built out an end-to-end surgical scheduling platform. I literally started with a PowerPoint slide, went around asking people if they thought there would be value if this happened, built it out from there, from end-to-end, from patients to front desk to schedulers to insurance approvals, all the way to ASCs coordinating with anesthesia. And that that got acquired in 2021, mainly because it was during COVID, and the system, one of the things it did, it synthesized best practiced evidence-based medical care with local operations to create pixel perfect instructions for patients.

Dr. Lukasz Kowalczyk (03:13):

So step-by-step instructions on what you needed to do for colonoscopies and their procedures, which have a high no-show rate. And so that got acquired, and became CMO of that company. And then that company went through, um, the Mayo Clinic AI Accelerator in 2022. Um, and I got just a firsthand account of what it was like to build AI healthcare applications in production at the Mayo Clinic with some of the top leaders. And that was about as best of a data infrastructure as you could hope for. And it was still really tough. And from there, my stock, uh, in my medical practice, like it vested and I was like, this is a really good time and opportunity for me to move out and take my learnings from clinical business health tech, kind of merge those into an advisory. And so over the past, uh, few months, I started up my own advisory, Soothien HealthTech Advisory, to help AI startups especially figure out how to go to market effectively, how to build value in their products and leverage data. That's kind of where I'm at right now.

Scott Zeitzer (04:24):

It's very, very interesting. I was just thinking about that whole transition and you going back to your parents and going, you know, I know med school was good, but I'm going AI.

Dr. Lukasz Kowalczyk (04:36):

Yes, yes.

Scott Zeitzer (04:37):

Uh, I'm sure that was an interesting conversation. We work with a lot of companies that are building out platforms for robots. We've been to quite a few meetings, and we were laughing with each other about they would, people would just literally come up to us and go, so AI? You know, and you're going, alright, great. So, you know, a lot of telemetry coming out of the robot, lots of zeros and ones, a lot of data. And what do you see for yourself like where AI can really help with all those data points? Before I even get to like rolling out the first role, there's so many robotic systems out there where they're trying to figure out what to do next and how to make that better.

Dr. Lukasz Kowalczyk (05:17):

So like for instance, gastroenterology, right? I think gastro is a great example of, actually gastroenterology has been on the forefront of the AI utilization, over 20 clinical trials in AI assisted colonoscopy for polyp detection. And you know, I think it's a great illustration because there's no question the data is there that these vision models for polyps. It's great. So first of all, why are, why is vision a great target for AI? It's pretty standardized. You have a very standardized set of data that you can utilize, kind of like in radiology dicom, well standardized data format that you can build good models off of. And so gastro, you know, you're gonna increase your polyp detection rate up to 8%, right? And so that's fundamentally, you think, oh, that's great, that's great. So we're picking up more polyps so we know that hey, for every, you know, like 1% detection of adenoma, which are the pre-cancerous polyps, we're gonna drop the cancer rate by 3%.

Dr. Lukasz Kowalczyk (06:28):

Which you think, perfect. Like yes, this is AI, this is a great application of ai, we should do more of this, right? You have, and you have clinical trials that are backing it up. So great. So you have clinical data and you kind of have the, the reimbursement data a little bit, right? So maybe you drive up like, you know, your pathology billing 'cause you're detecting more polyps. But that's like, if you just look at it on the

surface level. The American Gastroenterology Association just came out with a position statement and they said, uh, we can't really recommend it. And you would think after I just, if I told you that. They, well they said they, we can't come out for it or against it. And you would think with all of that like amazing data that you'd be like, yes, a hundred percent this is like the poster child for how we should apply AI.

Dr. Lukasz Kowalczyk (07:21):

And here's the problem, that yeah, you're picking up more polyps, but you're not picking up the right polyps. You're not picking...yeah. Right. You see it like everyone has that reaction. They're like, oh yeah, okay. Right. And so this is, I think it is such a great example of the difficulty that even when your AI quote unquote works, does it deliver the value that you need it to, right? So does it deliver the clinical value versus the business value, right? And the AG said like, go ahead and use it. You'll pick up more polyps. So then what's the ROI back, right? So thinking about the ROI back to the practice for instance, right? 'cause there's subscription models that you use with this technology. And then you have to think about, okay, well I'm picking up a polyps, so am I generating more pathology revenue? How, how am I paying for the system? And these are the, the real complexities. And I think it's such a great story to think through. Not only when you think that you have a great clinical use case, you think that this makes sense, but then is it gonna make a real difference? And is it, is it gonna generate an ROI, and what kind of ROI is it gonna generate? This is I think why health tech is so hard and you need experts that understand the verticals really well.

Scott Zeitzer (08:45):

Yeah, it's interesting. There's a company that takes biopsies for Barrett's, um, and applies, applies AI.

Dr. Lukasz Kowalczyk (08:54):

Yep. It's Watts .

Scott Zeitzer (08:55):

Actually I was referring to Castle, I think it was.

Dr. Lukasz Kowalczyk (08:58):

Oh, okay.

Scott Zeitzer (08:59):

Yes. Yeah. But now I gotta look up Watts. Now you got me on that one. And I found that to be interesting as well, where they basically said, Hey, you know, the biopsy came back with Barrett's, what do we do? You know, I found that to be interesting, right? So sure, we'll give you more Prilosec. That's that's great, great start. How often are you coming back to get scoped? What's your chance of developing cancer, et cetera. And I found it interesting that you could send it off to a lab that'll take a look. And, and then they were grading via AI, the chances of it becoming from non-dysplasia to actually pre-cancer, uh, cancer. And I found that to be fascinating too.

Dr. Lukasz Kowalczyk (09:40):

I used that system as an adopter. And again, you have to think about the entire workflow because I think like adoption of that system, again, where there seems to be a good clinical outcome, right? Where you catch higher or more aggressive stages of Barrett's with a higher percentage. And that's been proven out

in clinical studies. It's a good percentage, but here's a problem to get that sample you're adding on additional, like you actually add on additional time in the procedure, right? And so as a result, if you understand the workflow in endoscopy centers, they are well-oiled machines, right? And so clinicians, clinicians are, you know, the endoscopists, we're in there and the EGD, we have a mental framework of maybe five, 10 minutes max, right? And when you introduce any amount of friction in a system that is that efficient, it's like exponentially magnified, right?

Dr. Lukasz Kowalczyk (10:41):

The effect is magnified. And so you have an adoption problem. And I used that system because like I was like, okay, I gotta slow down and I gotta like, this is worth it. Um, I could have a 25% higher detection on the system, but let me walk you through the whole thing. But then when I did the Watts, right, the system, now I need to get the result back, right? So, and I gotta train my staff up on how to do it and how to prep the slides. And then I also have to get the results back, which is a third party portal rather than being integrated into our system. So this is why I got into health tech, it's because I think there's a myopic view rather than taking a whole operational end-to-end view of how you deliver the service, how you deliver that, that technology to clinicians, to your end users and how it, how it creates value to them. And a lot of physicians really, I think overall struggled with that technology adoption because of some of those operational challenges that it took to actually implement good clinical results, but hard to implement operationally.

Justin Bantuelle (11:52):

Yeah. That reminds me a little bit of something we've heard from a few other people where there's almost like a generational split, where people who have already operated a certain way, like they, it's, it's more painful for them. But then these newer generations of doctors coming up almost expect the technology to be there and doing things for them. Do you find that there's kind of an easier pathway for people coming on board? Or do you feel like kind of they're still being sort of trained up in a way that it's like, oh, operationally you'll run like this? Like I'm just curious if you see anything where there's different audiences or populations where maybe you get cleaner adoption versus maybe having to tell a much more compelling story or going a lot deeper onto the adoption.

Dr. Lukasz Kowalczyk (12:37):

You like teed me up here, so <laugh> like Yeah, absolutely. Right. So this is one of the, this, I think this is one of the core core metrics is understanding your persona value chain, right? You have to understand who you're talking to from the get go. And the reason health tech is hard is because you're talking to multiple people. Your user is not, your champion, is not your buyer. Now, of all three of those like aligned under one diagram, it's like done deal. Yes, please. More of that, right? But no, but that is not the case, right? And so absolutely, because each of those personas, and I, and I talk about that, I talk about this in, in a LinkedIn post that I just posted recently, is you have to understand the value and what is the, the core value? 'Cause different personas, a user, like a front end user, a scheduler will have a very different set of, of what they see as valuable in your product versus the executive decision maker buyer.

Dr. Lukasz Kowalczyk (13:43):

Right? Totally different. And the question is, who do you need to design value for? The hard answer is for everyone, <laugh>. You have to design value for everyone. Yeah. So like, so this is why I think I got such a great experience designing the surgical scheduling automation platform because I had to design it

for everyone from all the way to the C-suite down to the user. And when you design like workflow applications like this and you think about things operationally that you like, I think that the core there is then you have to, how do I capture the value in the process of the technology, right? How do I capture value? Because designing for a workflow I think is very different than designing to capture value. What metrics do I need in the workflow that I make sure that I capture? Like, you know, okay, so when I'm designing my scheduling section, I need to make sure that I have discreet data for, for cancellations, for no-shows.

Dr. Lukasz Kowalczyk (14:47):

How does that transmit back into the workflow? And then how do I create saliency of that value to the key decision maker that's buying the product or the key influencer, right? And so I think that that absolutely understanding persona is absolutely essential because then that drives your product roadmap. Like you understand how those, those values drive back into not only your product, but your sales operations, your marketing, everything. And that's one of the core values that, and messages that I try to transmit, especially to younger AI companies, is you need to think about things holistically. You can't just myopically think about the technology aspect of it.

Justin Bantuelle (15:33):

Yeah. It doesn't quite work. The if you build it, they will come, right? <laugh>. Yeah. I think so many people start on the tech side assuming like, I've got a great idea. Of course people want it. And that's like, wait, stunt

Dr. Lukasz Kowalczyk (15:44):

<laugh>. Yes,

Justin Bantuelle (15:46):

Of course it said

Dr. Lukasz Kowalczyk (15:47):

<laugh>. Hey, no one cares.

Scott Zeitzer (15:49):

<laugh>. Yeah, <laugh>. Well, and and you bring up an interesting point. If you're the scheduler, it's like, this is your criteria, man. Just, just help me get them in and out. Because the, the profit comes from, from a schedule's perspective, right? Is like getting everybody in and out on time. Patients aren't yelling at me. And I put that into the equation for profit. It's not just dollars. The staff is happier, the gastroenterologists are happier.

Justin Bantuelle (16:17):

I mean, yeah, you get the complications of like the no-shows, the reschedules, filling gaps that just opened up, right? Like, I mean, there's a logistical nightmare surrounding all of that that like, Y]yeah. And that's just before you even get to the actual procedure. <laugh>.

Scott Zeitzer (16:30):

Yeah. Right? Exactly. And then you're in the procedure and now you've got, who cares about what, right? So if you're the GI, just, we'll, we'll stick with just for the heck of it, Barrett's, just 'cause it's, yeah, my way of thinking, it's like, all right, let's just stay with Barretts, right? It's just EGDs, which have a lower than colonoscopies, non-show rate. But even there, you just, you made a great point. It's like, hey, if I'm going to use an AI setup, this is gonna take longer. This is not gonna be five to 10 minutes where I go down, I scoop, I'm out, I'll let you know in a few days how we're doing. No, no, I gotta grab it this way. I then have to go send it off to somebody, and now I gotta train my staff on that. Not only that, instead of giving them an answer, the patient an answer in like a day or two, I gotta a week or so, it's not integrated into my system. My staff has no idea what to tell anybody while they wait for the week. Right? There's so much that is going through the GI's head, and it's all about taking good care of the patient. It's like, yeah, that's why I slowed down to send it off, man. Right, and not, not mention that you may not get paid for it because the insurance company is going ai, I'm not paying for AI.

Dr. Lukasz Kowalczyk (17:47):

Oh, well we could get all the reimbursement side of AI. Like yeah, I, I give a whole talk on AI, ROI, and different models on that, but I think you're hitting on one of the, the critical points. So, but staying on the, the Barrett side, it was, you take biopsies and then you do the Watts or that were that particular type of biopsy in addition to what you're already doing, right? So you're layering work on top of it. So here's the fun part. What if there's a disparity <laugh> in the results <laugh>?

Scott Zeitzer (18:20):

Absolutely.

Dr. Lukasz Kowalczyk (18:21):

So it's like even, even more fun, right? And what if there's a disparity in the other direction, right? Where the Watts is supposed to help you pick stuff up, but it doesn't show the advanced case, which I've had happen. But the biopsies do. At the end of the day, you gotta go back in and you gotta do more biopsies, right? Like you just have to, you, you do, you do more. And it, and it's fine. But I mean, I think that it's, it's being really aware of these operational issues. And this is why subject matter expertise is so essential, and in AI it becomes even more essential. And I built a deterministic system, right? So you, you point click, you get a very reliable result. With AI, you, they're probabilistic by nature, right? They're gonna be wrong. And so subject matter experts are essential in the evaluation process of outputs, and having a systematized set of metrics to grade the output and tell you very quickly what's good and try to get to that golden data set of outputs that you want. And you could only do that with subject matter experts, which, you know, clinicians, we're expensive. We're expensive. There's scalability problems associated with that as well that you have to overcome and figure out. So AI is, is not a panacea. It's a very different way of working. It's a different framework. Especially for engineers.

Scott Zeitzer (19:56):

It's a great tool. Uh, you know, like they always say like, oh, we're never gonna need a pathologist anymore. They'll, AI will just figure it out. And it's like, no, but wouldn't it be great if you could get the pathologist to actually dive in and make the call rather than the mundane

Justin Bantuelle (20:12):

Right, speed up the pathologist

Scott Zeitzer (20:14):

Speed up the mundane

Justin Bantuelle (20:15):

The accuracy of the pathologist, right? As opposed to replacing it. Yeah.

Scott Zeitzer (20:19):

We're all human beings. So if you have somebody staring at 400 different slides a day having to do mundane, look, hey man, you're gonna get what you get. And I have a very good friend of mine who is a pathologist and he's made that comment, you know, I gotta get up every now and then because I gotta focus again. And it would be great to be able to go like, Hey, these look all standard to me. Go do a, you know, do a quick review, do your review, but these, something's up, right? And you could then make the determination based on that and have a more focused determination. It leads me to the question of like, you're getting all this data back. How do you apply that? I go back to it, to improving the next generation of the product or even a new product.

Dr. Lukasz Kowalczyk (21:08):

Oh my gosh. That that's where the evaluation, the evaluation process really serves as your guide, right? If you have a great eval process as part of your AI strategy, that's gonna guide your roadmap because it's gonna help you to understand. But you're literally getting the user feedback from the subject matter experts about what's working and what's not working and how to improve. And that's just the AI side, right? But you're not really even talking about the uh, just the pure implementation side of things, which I think is more important like human factors. But just staying on the data piece there, it's incredibly valuable to get that, to get that cyclic feedback to learn very quickly from your users about how the output is working and is being effective. And so this concept of teaming, physician-AI teaming. Is a much more productive type of approach because number one, you're giving clinicians and physicians everything they want, they want agency. That's really critical. Gives them agency, let them be in control of the system. And then you gather the feedback. And I think all of us here, when we work on teams and we sense that cooperation, so much more gratifying, right? It's much more gratifying to interact in those types of systems.

Justin Bantuelle (22:35):

You touched on initially like the imaging, which is also, when I'm trying to explain to people. like it's my go-to, 'cause everyone like lay people, they hear AI and they think ChatGPT, right? And it's like, no, there's some really fascinating like targeted applications and I talk about like, yeah, colonoscopy and like you just plug the video feed in and it overlays and it's like, wow, that's really cool. People get that very quickly, right? And we talked a bit about like the diagnostic elements of it, right? Where you're still like largely working off of imaging and things, but thinking a bit about some of the like larger robotic devices performing more involved procedures, whether it, like surgical in nature or like bronchoscope where you're navigating like way deeper into the body and things like that, right? I'm seeing a lot like there too, where people are trying to figure out where does AI slot in?

Justin Bantuelle (23:25):

And obviously it could help for like driving the device to where it needs to be with planned pathways and the things. Um, but I'm curious about more of the post-procedural side of that and implementation there. Because these things come up with like reams of telemetry and there's a lot of, of trying to figure

out, how do we mine that data for something valuable within it? We know there's something we can get here. And I'm seeing some efforts at like continuing education, right? Like trying to understand like, hey, which procedures are going well? Like what are people doing that's interesting and not interesting? Like what can we get back in front of people to provide value beyond during the procedure? Like what, what are you seeing happening in that space?

Dr. Lukasz Kowalczyk (24:11):

So first of all, from a, from a design perspective, absolutely. I think that that is one of the core things of if you're just designing to solve a workflow, that's one thing. But if you understand where the value is first in the product, I keep going back to value. And I think that overall, you know, there's this concept in tech of minimum viable product in health tech that's gotta get changed. The v's gotta get changed to valuable. What's your minimum valuable product, right? And like I challenge, like the health tech companies that I work with, I challenge them, you got two minutes to tell me the value that your product delivers clearly, right? And that's gotta show up in, I tell them to imagine in a dashboard. 'cause those, that value has to show up very clearly and you gotta backfill to those features. So on the post procedure side, you're absolutely right.

Dr. Lukasz Kowalczyk (25:07):

Like what are those metrics and how do you design backwards for them post procedurally? How does that, how does what happened with the surgery correlate with the outcomes of that procedure? And how can you pair those up? And that's where you have to design for the action, right? So what is the clinical action or what action is gonna take place that's gonna modify that? You know, I think that's what every company right now is trying to figure out because like what, like where are the data sources that you need to do that? Like to get, to get that valuable data back? And I think that's another point to talk about is just overall data maturity in the healthcare system and how that's gonna impact your minimum valuable product as well.

Scott Zeitzer (25:56):

Yeah. It's, it's interesting, you, you, you said, you said the word dashboard, you know? Yeah. And for us as a company, as a software company, we spend quite a bit of time and earn quite a bit of money, I hope, developing the appropriate dashboard for the appropriate user. Because you, you touched on it earlier where you were saying like, hey man, if you're a schedule, you need a scheduler, you need one type of dashboard or, or set of information. Clinician, and again, you touched on this before, like you're not selling to one person, you're selling to multiple people. When you're bringing a large robotic system, hey, the hospital's paying for it. It's, it's, it's not the surgeon, physician, et cetera, it's the hospital. So the hospital's gonna want data. We've developed dashboards for specifically the hospital. We've developed dashboards for the physician, we've developed dashboards for the field service engineers who are like uhoh, there's a robot not working <laugh>.

Dr. Lukasz Kowalczyk (26:52):

Yes.

Justin Bantuelle (26:55):

And that's where another interesting AI element comes in with predictive failure modeling, right?

Scott Zeitzer (27:00):

Yeah, I agree.

Dr. Lukasz Kowalczyk (27:01):

So a couple points there. So first of all, we gotta talk about the elephant in the room about how you design a product for what I call like right sizing AI, for the organization that you're going into. So HIMSS put out a great paper, I also talked about this in my LinkedIn post. We really need to rethink who we're building AI for, right? 'cause the vast majority of publications are coming out of systems that have extremely high level six, seven data maturity and they can do anything that they want. Well, 85% of hospitals, according to HIMSS, have literally zero data maturity.

Scott Zeitzer (27:35):

I was just gonna bring up the zero number. Yeah, yeah.

Scott Zeitzer (27:37):

Yes. Right? So, so you need to think about how encapsulated your product is within itself for the data that it needs to execute, right? And these are all strategic, these are all strategic decisions that you have to make, right?

Dr. Lukasz Kowalczyk (27:55):

And I really push companies hard. Your minimum valuable product that first, that first product, if you don't, if, if you need to get it to where you don't touch the EMR initially, but you can, you can drive value quickly. There, you go to your, to your customer and self encapsulate because it's a partnership, right? Then as you build trust, you can gain access to the systems and integrate and do those things. But if you, if you mention the word integration, go ahead and add on 12 to 18 months to your budget, to your entire sales process, and your burn rate, right? Like everything. Right? Just go ahead and just tack that on. And you gotta, you gotta figure that out. And that's why I push companies to really as like, you know, Steve Jobs said, simple is hard. You know, it's how you know, and you, and we really gotta think about like, who, who are we building AI for? And it's gotta be a graded strategy across the 80% of hospitals that are at zero to the big systems that, that are already kind of solving their own problems.

Justin Bantuelle (29:00):

Yeah. And that's a hurdle we constantly bumped into where it's like we can race forward to this point and then like you said, like, okay, without these other data sources that we need someone else to grant us access to and then need some kind of interpolation occurring <laugh>, we can't really like move further. So if you're not like, yeah, you don't do that initially, but if you're not road roadmapping that as part of your starting point, you're gonna have a bad time. Like where it's like, oh, you're just, you stalled out for the next 12 months, right? Like yeah.

Dr. Lukasz Kowalczyk (29:31):

One hundred percent. And, and like, and I tell companies, look at every data source and you know, like depending on the generation I'm talking to, but you know, kind of my generation of founder, it's, it's like four is Gump it, right? It's like every data source is a box of chocolates, <laugh>.

Scott Zeitzer (29:46):

Yeah, there you go.

Dr. Lukasz Kowalczyk (29:48):

You have no clue what's gonna be in there. You, you don't know like, like the formatting, like everything you just have. So just like keep adding months or years to implementation depending on how I need this data source, right? And that, I think that's, that's why it goes back to the difference is when you design for a workflow versus understanding how to design for an analytics framework that delivers value. Because then that drives you. You begin to understand your integration needs and where your data needs to come from to deliver that value, which I think, you know, is hard, is is hard for, for a lot of founders to understand. On top of all the other operational issues we've discussed.

Michael Roberts (30:26):

For years, we've been hearing this conversation about how people are gonna monetize data. We're, we're gonna get in there, we're gonna monetize it and everything's, it's gonna be another revenue source for us. It's gonna be all these great things.

Dr. Lukasz Kowalczyk (30:38):

Yeah.

Michael Roberts (30:38):

This is something that I, guys, we've probably heard for six, seven years at least. Are we any closer? Like, is anybody saying like, yes, this as its own separate service is something that we should be paying for that we're in that hospitals are interested in paying for in any way we bought

Justin Bantuelle (30:55):

Our device and now you're buying our subscription model for our like fascinating data platform?

Scott Zeitzer (31:00):

Or, or the by the way, the other way around, uh, fellas, I'll add that, doc, before you answer, right? The other way around is the hospital comes back and says, you want data? I got data, right? I have a lot of patients, I'm think, right? And I'll either barter it, right, or for all that data you could reduce your, your monthly fee for this capital outlay or something. Go ahead doc. I know you're excited. Sorry.

Dr. Lukasz Kowalczyk (31:25):

Oh no, I mean like no, this is, this is like literally the model, right? It's almost like, like Netflix, right? It's like the owner, the owner of the content is really like, really has the power in the system, right? It absolutely, absolutely. Like I think that this is a, is a major point is that the monetization now rests squarely in the hands of, of hospitals to work with these companies. Number one question, when someone, when a company comes to me and says, I have an AI product, I'm like, what's your data source? What's your data source? Because how exclusive is it? How quickly can you get it? What does it cost you to get it at a particular rate, right? At a particular rate? 'Cause like, you know, uh, depending on, you know, I can either get it very quickly by expending 10x or you know, very slowly at 1x, right? Yeah. So, and how proprietary is it? How insulated is it? All of these things. And so I think that hospitals are in this, are in this position now, right? They're in this position where they have a real leverage point with companies to be able to co-develop charge partner. And that's why I think you've seen a lot more kind of accelerators and incubators pop up because they're starting to see that there's just no way that your product works without, without my data. And that's worth something.

Scott Zeitzer (32:52):

Yeah, I agree Doc. I think like as some of these hospital systems are large now, these are not, you know little itty bitty babies out there. I mean we all think of like the Mayo Clinic and the Cleveland Clinic being, well there's a ton of them out there that most people don't know about that are quite large. Down here in New Orleans. We have Ochsner, which is quite a large, quite a large medical system. And to your point, like they've got a ton of data and I'd be curious to see if the hospital systems, the larger ones, if they start trying to come up with their own incubators.

Dr. Lukasz Kowalczyk (33:28):

A hundred percent that, I think that's exactly what's happening.

Scott Zeitzer (33:31):

Instead of it being like, Hey man, we're out in, you know, Silicon Valley and we're gonna go do what we're gonna go do and we'll come see you. I can imagine a lot of hospitals now going, you know what, I got 20 smart people right over here that we're funding, and we're looking into boom, boom, boom and boom. And it's all from a hospital perspective. And then we'll tell you what we want. And and I think that's gonna be very interesting as well in the next uh, uh, five to 20 years, depending on

Dr. Lukasz Kowalczyk (33:59):

I think so, and again, the, and kind of Scott, what you going off of what you just said, and I think this is why I think you need clinicians. Like the evolving skillset of subject matter experts and clinicians are ones that understand product management, how to build products, how to interact with technical teams, clinical teams, executive teams and operational teams around, in the AI space. I think that that's gonna be critical because managing products, understanding where value is in what you're trying to build, it's very important. And that's kind of, you know, for me, that's why I put together this framework of the clinical enterprise value stack, right? Like understanding, you gotta have like those three core components to any health tech product. You gotta understand the clinical side, you gotta understand the technical side, and you gotta understand the financial side of where is the value strategically across the different stakeholder personas.

Dr. Lukasz Kowalczyk (35:03):

And it's not only just like, how are, how are you, like you gotta make money for the business, but how are you gonna make the ROI for the actual, your actual client, number one? And then what margin are you gonna get off of that? Because the, the models are are not all the same. And that's why it's so tough. And that's a very different mindset for hospitals to, and it's a very different expertise. Even building data infrastructure, right? We talk about all this data maturity and data infrastructure. That's a very linear process. As you guys know, building a product is a much more circular and iterative process that has, it's much more open-ended and non-linear, essentially.

Michael Roberts (35:44):

Going back to the question just to kind of untangle a bit, 'cause I, you know, it's got you through a big curve ball in there in terms of like, okay, does the hospital have all the power now? Is there any shot for the other companies, then, to very good, you know, sell data as a, as a separate service? Or is it, hey, the, the power shifted now.

Dr. Lukasz Kowalczyk (36:02):

So like yeah. Of a company being like some sort, like becoming an aggregator of some sort of, of some sort of data.

Justin Bantuelle (36:09):

Like, okay, so I have a, I have a surgical robot and I've got all this data in there and I'm gonna give you a fascinating insights dashboard and you're gonna get so much interesting stuff beyond like, obviously my device helps you do your procedure. The value is in buying the device to do the thing. But now I've got a subscription model on data and I'm surfacing very meaningful key metrics that you're gonna be so excited about that of course you would pay me for this subscription model to get at that data. Like, I think is, that's what we're hearing a lot of device companies wanting because they wanna monetize beyond the capital sale, right? And that's where we've seen a lot of companies find that challenge where it's like, oh man, figuring out what they actually would pay for <laugh>, but that's sort of their holy grail.

Scott Zeitzer (36:57):

I'm gonna add to that, I'm gonna add to that, doc, before we allow you to answer. I'm gonna add to that, like there was a, a doctor that was given a talk, uh, Steve Bell, who's pretty well known in the robotics system. Yeah. And Dr. Bell was just mentioning like, hey, everybody assumes like every doctor is excellent at everything. It's like, it's just not the case, man. I mean it's like, it's like in everything in life, and some of the data points, Justin, that some of he fields the robotics companies can, can provide to the hospital and provide value, by the way, gentle way of saying can sell back to hospital would be like, Hey,

Scott Zeitzer (37:36):

Our product is being used by, I'll make it up, a thousand different clinicians, right? And this is, this is what we consider to be A level work, B level work, C level work, right? I don't think they'll ever do it like that, but you know where I'm going, and how are your guys doing compared to this, to the norms? Do they need more training? Do, do they need more tips, uh, et cetera. Because my son, the doctor can't help myself. I always remind him, it's the art of medicine, man. It's practice. Practice makes perfect.

Dr. Lukasz Kowalczyk (38:08):

Yeah. A med school colleague of mine, uh, Mark Solomon out of Orlando, he's running one of these like platforms that is, is trying to capture some of this educational content, right? About like, how do you do X, Y, and Z? And there is not enough of that cross collaboration. Or I think another thing is just, OR dynamics, right? Like human to human dynamics, capturing those like at a critical juncture in surgery, like understanding what are effective communication strategies during procedures, not just techniques, but interpersonal ones. And so I think that it's, you're, you're right, it's where is the real value? Because I think the, the pushback on some of these is that, OR, or like medicine is like politics. It's all local, right? And so, you know, everyone falls back to, ah, but that's just not gonna work for me. Everyone in medicine is special, right? And so trying to develop metrics, you know, metrics around that.

Dr. Lukasz Kowalczyk (39:07):

And I think there is validity at that point. And so that goes back to AI about, you know, you may have like a generalized product that you said, oh, this worked, worked great on my test set of, test set of data, I validated it, it works great. Then you get it into local production and it's just terrible, right? And I'm sure we've heard those stories all the time and it's really, and that's where I think kind of coming back full circle is about then you need the eval process. How strong is your eval process for that local, for that

local company to be like, okay, I could see how this is useful, but we need to fine tune it. And then you as a company be like, great, we have an entire process, an entire eval metrics dashboard to fine tune it for you.

Dr. Lukasz Kowalczyk (39:56):

We got a process, we're gonna show you like, okay, this is not working for you. This has gotta get better. And so you really, if you're gonna have data as a strategy, you also have to have refinement as a strategy. I think really, really customizing it to let them know that, you know, for your population, for these types of patients, for the security, whatever it is, this is how we're gonna refine the model for you. And that's the hard part, right? Every coming outta tech, you can't blitz scale health tech. It just doesn't work, right? It's every implementation's unique and that's the hard part, right? That's, that's the bitter pill that you have to swallow, so to speak to in health tech. So to monetize it, I think you really have to provide that level of specificity to that particular client in order to get them to buy into that data strategy.

Michael Roberts (40:50):

So guys, I think we're obviously all super excited about this topic.

Dr. Lukasz Kowalczyk (40:55):

<laugh>. Absolutely.

Michael Roberts (40:56):

Yeah. Dr. Kowalczyk, this is your, your invitation to come back and join us for another lengthy episode where we can get into all these questions with you. 'Cause we're having trouble, <laugh>, we're like all excited and wanting to throw more questions at you as we, as we're over here. So this is definitely something that yeah, we're, we're all geeks about this stuff and really appreciate your perspective on it because it is interesting. You do hear so many different opinions on this space, and yet so many of them aren't clinical. So many of them are just, hey, armchair quarterbacking it here, I got an idea. You know? And so it's like, you know, so it's, it's good to be able to, to link that back. So Dr. Kowalczyk, we'll talk more <laugh>. Thank you much.

Dr. Lukasz Kowalczyk (41:32):

Look forward. Thank you much. This is great.

Michael Roberts (41:34):

Yeah, it's such a pleasure for us. In our interview, Dr. Kowalczyk shared insights into how medtech companies can harness data to create useful products for physicians and how AI can be useful in a clinical setting. To learn more about what Dr. Kowalczyk and his company does, check out soothien.com. Thank you to our listeners and our viewers for joining us for this episode. For more on the Health Connective show, please visit hc.show for previous episodes and Health Connective as a company.