

VIVE Conference: Grant Thornton's Claudia Douglass and Dr. Peter Pronovost speak on AI use in healthcare

Transcript

00:00:19:05 - 00:00:58:09

CLAUDIA DOUGLASS:

Hello, everyone. I'm Claudia Douglas, and I lead healthcare at Grant Thornton and I'm delighted to be with you today. We do tax audit and advisory services, in healthcare, with healthcare providers, as well as private equity, portfolio companies, and we're doing a lot in the space of AI and digital. And so, we're delighted you're here with us this afternoon. So, thanks for coming.

And I have Dr. Peter Pronovost with me, chief transformation officer from University Hospitals. Delighted to have him here.

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DR. PETER PRONOVOST:

Thanks, it's great to be here.

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CLAUDIA DOUGLASS:

Thanks, Peter. So, we wanted to talk to you a little bit today about, you know, we want to make sure we understand kind of who's in the audience. So who's using AI -- not just in the finance function, but in the care journey right now? If we could have a show of hands of people using AI and care journey.

Okay. So just a few, not too many. So, I think with that, one of the things we've been learning is when we're doing this kind of work, Peter, tell me a little bit about, like, what you're seeing in the clinical side versus the non-clinical side.

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DR. PETER PRONOVOST:

Yeah, so great question. You know, there's so much uncertainty or ambiguity from our compliance officers from what FDA requires of, you know, that ... it needs FDA approval, that we're using a lot more applications in non-clinical setting. It's just a whole ... I see a head nodding, right? I mean, it's easier to use it for a call center. I think the real value is going to be in the clinical settings, and you probably saw some of the

latest reasoning models like the [ChatGPT] o3 now performs better than the most expert physicians in the world. I mean, they almost are foolproof for avoiding diagnostic and therapeutic windows.

But the regulatory burdens and the uncertainty about the FDA ... like, I'll give you an example where, working with the company on remote hospital that a fall module is used all around the country ... many of you are using it. Our legal team said, "(it) needs FDA approval." I said, "Okay, well, a lot of people are using it when it doesn't. They're conservative, and if it's good, they keep me out of trouble." And but they said, "So we're doing it as a study to submit data to the FDA." But so, it's just it's, I think the ambiguity is driving us towards less clinical applications.

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CLAUDIA DOUGLASS:

So, with that, what are some of the harms and the things ... why do you, when we were working together on the strategy around this, what are the top five things you see that we're trying to address with these solutions?

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DR. PETER PRONOVOST:

Yeah. Great point, Claudia. I mean, the reality is every health system in America has a cost problem. You know, and in very simple terms, we have to get our cost structure down so it can be profitable on Medicare-level payments, because they're the only payer that's growing in most markets. And there's a couple really big buckets: We'll say one -- just cost per discharge that has labor costs, supply costs, resources like drugs, blood. There's a cost from harms, like any single complication doubles or triples your cost of care. And 1 in 4 patients are harmed. Right. So huge waste. there's cost for harms, for lack of coordination, chronic diseases. There's an enormous amount of what we will call administrative waste, maybe 25% of all the prior off and utilization that is probably the most ripe for AI because it's all just data

flows and decision rules, and one team doesn't know what the other team's decision rules are. But if you made them transparent.

And then finally it's access, and how do we get people to get care? But Claudia, I just want to say, when we see these models, and as a executive in a health system, you know, I'm probably pitched 30 of them a week, I mean, it's exploding. But the reality is, almost all of them are simple predictions. And what I would say is prediction without prescription adds me no value. Like, if I don't know, now okay, what's the defect in value, coupling it with what's the next best action? Coupling that with what I'll call a management system that says was it done, when and if not, what's the escalation? Right.

Because I mean, what we're trying to create with this is what's absent in healthcare is a management and accountability system. And all three of those steps you know, are essentially, yes, show me where there's a defect or a risk, but importantly, link it to what's my action to was it done? And if not, who's it being escalated to. And that kind of holistic link I haven't seen on the market yet.

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CLAUDIA DOUGLASS:

So when we were doing this work, I think one of the big things that's important is the SOAP methodology and how ... can you talk a little bit about that? That we tried to go to do that first before we did the tech.

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DR. PETER PRONOVOST:

Yeah. It's a, it's a great ... So, when we were looking to take cost out to get to Medicare-level payments, you know, we largely jumped to fancy models with AI. A lot of what we need is simply a regression model or just some prediction. It doesn't need to be that sophisticated. But I'll share with you ... we developed a "hierarchy of value" that says, "What could we stop doing that is just pure waste?" We'll go to that in a second. If I can't stop it, could I automate it? So, take the labor out. If I can't automate it, it ... could I have it being done by a less expensive staff? If I can't do it by a lower expenses staff, could I do it remotely and get more productivity?

And then probably the most important part of this model is — what stays sacred at the bedside?

Meaning, this is the special thing that makes a doctor a doctor, or a nurse a nurse, or a pharmacist ... And you don't want it ... you don't want to take it away. It's the secret sauce.

So, I mean, I'll give you a concrete example of and hopefully someone makes a company to automate this. We started asking our nurses where there's waste, and it came up that policies are an enormous source of waste. Some were from the federal government or The Joint Commission or the DMV that we're working

to regulate. But most of them were our own imposed policies that unduly burden people. And maybe (they) made sense when you had an 8% margin. They make no sense when you have a negative margin and there's no value for them.

So just to give you an example, over the last three years, we sunset 2,600 policies across our system — 2,600. We specifically did this exercise with our nursing leaders and said, "Tell us, what policies do the burden exceed the benefit?" They at first said, "Oh, you know, Peter, we have a policy team. We ask that every month. We really haven't had any topics on our agenda." I said, "I don't buy it. Pretend you had the freedom to stop whatever you wanted," because they didn't trust that we would actually, you know, remove a policy. And they said, "OK, we ended up with 180 policies that were embedded in 1,400 order sets." Most of them were frequency of vital signs, but it was 30% of a nurse's time that went away before we even started automating. And so, the point is, get rid of waste before you starting to look at what are the things we can automate. Because there's a whole lot of waste that we're riddled with.

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CLAUDIA DOUGLASS:

Yeah. And one of the things, I wanted to talk to you about, and when we talk about AI, we are talking about ... these are the harms. Sorry. We're talking about ... One of the key things I'd like to talk about is this "assisted" or "augmented" intelligence versus "artificial." But Peter, you had the stethoscope example. Do you want to talk about that?

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DR. PETER PRONOVOST:

Yeah. I think because the ... we know words matter. Indeed, words make worlds. And when we call something "artificial," it's a negative connotation. And we're putting barriers to it. But if I like ... prior to the stethoscope, physicians would literally put their ear in a person's chest to hear it. Right? And it was horrible. A lot of errors.

So, we had this "augmented" hearing that allows you to hear heart sounds or lung sounds or better. And I think this is just a digital version of that. It's an augmented or an enhanced version. And I think we have to stop seeing it as separate from, especially with the emerging data from the reasoning LLMs that they literally perform flawlessly for diagnosis and treatment. I mean, it's, you know ... and given how 760,000 people die in the U.S. or are harmed from diagnostic errors, I mean, it's criminal that we're not spreading those.

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CLAUDIA DOUGLASS:

So, you've been involved in HHS (Department of Health and Human Services), with Trump, with Biden. You've written the PCAST Report on patient safety. Can you tell us a little bit about what you think about for the future of AI?

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DR. PETER PRONOVOST:

Yeah. That's great question. There's so much change coming out from the federal government now. And, you know, I would say what is certain is disruption. What is uncertain is the destination where it's going to go. But I would say there's a couple really hopeful things that are coming out of it.

There will no doubt be an acceleration of AI and tech. I mean, this is a ... they're very pro tech as they're bringing a lot of people, which I think will be an accelerant. Because I said where most health systems, like I share with you, are riddled with fear because we're risk-averse organizations. The rules aren't clear. Our compliance officers don't want to get ahead of us. And, you know, it's unclear what the FDA requires. And I think there's going to be a lot of either reduced risk for doing those things or clarifying it. And so, I think there will be much more, there will almost certainly be reduced regulation to accelerate this kind of thing. And there will be a whole lot of incentives to use tech for chronic disease and, you know, reduce harm that which, again, they've been largely neglected in, you know, in our investments so far. So, I think they'll you're going to see a rocket ship from running AI.

You know, Claudia, the one thing that I think the AI market and now you and I have talked about this, where we're putting Vitalchat in our health system, is the output of every AI model or LLM model is some form of a probability statement. It could vary, but it's essentially a probability statement. And there's compelling and overwhelming data that clinicians are horrible at interpreting probabilities. I mean, absolutely horrible. They ... we make bad decisions all the time because we don't understand it.

And there's been some research, not in AI, but just in general. Much of it comes ... a great book called "Risk Savvy," that comes out of the Max Planck Institute, showing that if you show physicians graphics like of 100 little stick figures and you shade in what would be the equivalent of the probability, they make much better reasoning, than if you say, "OK, this has a 50% probability, this has a 30(%)", how do I make a decision?"

And I think there's been way too little research, or even just evaluation, of, "How do I present the output and how do I build trust so clinicians will use it?" Because I was part of the development of the TREWScore. That was probably one of the most, you know, impactful

sepsis scores. And it, it has like, AUC (area under the curve) of, like, 0.94. I mean, it performs really well. But none of the clinicians would use it because it was like this black box. And they ... they're making a clinical decision that's life or death. And they were ... there was no work to trust it.

And I think it's never going to be acceptable to say, "Trust the model because it's my license down the line," or, "It's the patient's life on the line," that we're going to need a set of rules about how these models perform that say, you know, "What did I test it? How did I perform, who did I do it on?"

And I can share the vast majority of vendors, when I asked for that, literally get patronizing and say, "Oh, Peter, don't worry about it. We got this. The math is complicated." And which I do, I say, "Okay, I have a Ph.D. in statistics. I think I could figure the math out." Like, just tell me what the hell the model performs. And I think that we're ... that's not going to fly in and it shouldn't fly. We should have a standard way of showing the performance. And I get it changes over time, so we're going to need some parameters of the use case to what you developed it on. But saying, "Just go use these things," I think is irresponsible.

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CLAUDIA DOUGLASS:

I think so, too. And I think as we were doing the due diligence on this, we wanted to make sure. AI was a new topic in, in the intelligent clinical environment, right? And we're talking about computer vision, natural language processing, machine learning. And when we looked at this, you know, the AI still being tested, right? The falls piece is still ... you're still iterating, right? But in your pilot, could you talk a little bit about, like, some of the key results you're finding?

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DR. PETER PRONOVOST:

Yeah, yeah. So super, exciting. We did pilot using the Vitalchat technology. We're, like, a 17-hospital, \$6.5 billion system. But we tested it in about 156 beds in across five hospitals, an ICU, a children's hospital, then some med-surg bays. So, over the six month deployment, our cost to install and the hardware and all that we put in was, about \$750,000, maybe \$800,000. In those six months, we saw a \$10 million return. So really, really exciting.

And we're looking to go to a full model. But let me just, share with you a couple things why, at least from our view, is ... you know, too often we buy point solutions or use cases for models rather than a platform, and we are breaking the bank with that because everyone is ... 80% of the work is data work that you just repeat for every use case ... is literally wasted money. And if you buy a point solution and you want to add to it, you know it's another million dollars, and 50% of health systems are losing money.

And so, what we have with this is a platform that we had use cases for no marginal cost. So, let me give you example. Where once we start to deploy whole hospitals, we are now going to have remote social workers covering multiple hospitals on the weekend that I wasn't able to do before. We're going to have healthcare managers working remotely, and literally both of those will double their productivity about how many people they care for.

We also, I mentioned earlier, that SOAP model about, what could I automate, what could I stop? As part of this work, we did this, really innovative model, what we call the "Care Team of the Future." And what we said is too often our care models are organized around role. So, I'm a nurse and I could do this. I'm a pharmacy or an MA, I can do this. What we said, again, imagine a world where we're just looking at tasks. Forget about who traditionally does the role and say who is the best person to do this task for the patient?

And it was just, I mean, it was so energizing. And like I'll give you an example. What came out of that is a new care team with roles we never dreamed of. So, we have a whole new role of a personal hygiene specialist. And because what we found is there were some LPN or MAs who were passionate about giving people hygiene — like that was their, like their love language. And they cared deeply about people and they wanted to do it all the time. They didn't like all the other stuff. So we said, OK, well, what if we created a role and that's your job on this care team, right? There is another one who was really, really a little more extrovert about soliciting, "Are we meeting patient's needs?" Right? And so, they're a patient care manager. And all they do is walk around and make sure we have what you want.

And we designed it to say, "We're going to be doing this, but it has to be 20% less total labor cost per patient." Right? So, like you can't, you know, it's not "put one nurse at every bedside." And, ah, like the turnover with this, and the turnover with our Vitalchat is just unbelievable.

The other thing we're doing with Vitalchat now that may even be the most impactful thing is, as you all know, there's a huge nurse shortage and the turnover of nurses, especially new grads is, you know, about 40% in many hospitals. And the problem is, and it's not widely known, there's a lot of reduced experience for nurses in their clinical training.

So, when a nurse graduates and starts working, they feel safe caring for two patients because they're just not experienced. Well, in every hospital they get thrown into caring five or six and sometimes even more. And they understand that it's stressful, they don't feel safe, and we haven't had a way to do that. And so, what we did with the remote nursing is we intentionally got either nurses who were very experienced, but we're going to retire and this is in lieu

of retiring, or keeping them at the bedside. But they were the more senior ones.

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CLAUDIA DOUGLASS:

The mentors.

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DR. PETER PRONOVOST:

And what we do is we pair them in, and we build in the model so they have time to make sure they're coaching. And it's kind of like a "phone a friend," you know ... "Oh, I have a question about this." And the senior nurses love it. They're like, "This is what I felt like. I'm doing a nurse's work all the time." And the junior nurses love it because they feel like, "I'm safe. Like, I know somebody's got me." When you didn't have this, they could be at night and alone, and there's maybe one other nurse who's busy.

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CLAUDIA DOUGLASS:

So, Peter, I love this. I want to end on why this is so different from our transformation model, the pathway to proven performance. Can you talk? Because when you're talking, you feel the love for the team, and you can see it in your face.

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DR. PETER PRONOVOST:

Yeah, yeah. So go for it.

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CLAUDIA DOUGLASS:

Why do you think ... you can't just deploy tech, you have to have the right leadership governance. Can we close on that, and you can talk a bit about that?

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DR. PETER PRONOVOST:

Yeah, sure. This is, Claudia, a really great question. And though this is about tech, I think we've largely failed just deploying tech. It won't work. We ... I personally believe deeply that the secret of great care is love. And love is defined as the energy that is within and connects us all. And what we try to do is leverage that power of love within and between people to radically improve health and healthcare.

And the way we operationalize that is bringing together three philosophies of ... three management philosophies ... that are well known but not linked. The first is what we say "believe," and that is see every employee as caring and competent, and that they are treated with dignity, and they have the resources to do their job. [It] doesn't exist in health care right now. The second is "belong," and you've probably heard it in all of our stories. What that says is we know innovation flourishes when you bring diverse people

and ideas to meet, mate and multiply, right? There's not rocket science. You just bring like ... the brainstorming we did. But too often, organizations don't have the structure to house those ideas or a safe culture to speak up. And so we spend — we call it our fractal model, bringing them together.

And the last part, which I talked about our management system, is the overwhelming data that good management matters and good management is almost entirely absent in healthcare. And that's not my words, that's [Stanford Economics Professor] Nick Bloom's from a ton management research. And accountability is literally nonexistent. I mean, my docs generally do what the heck they want to do, and even though it's evidence based.

And so we've put that together to create this cultural transformation, because once you hand that ... these kind of tools, it's like rocket fuel. But if we didn't have that culture where the social worker and the case manager and the MA and the hygiene specialist all see each other as equals and peers and are innovating to think, the magic would never be there. We'd be in the old model of "I'm a nurse. This is my job. That's all I do." So ...

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CLAUDIA DOUGLASS:

And we've been working on this together and we're deploying it at other health systems. We've done three or four projects right now, and we'd love to talk to you

more about spreading it across the whole industry, because we believe it's transformational.

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DR. PETER PRONOVOST:

Yeah. And Claudia, let me just ask, because some of you may hear like this sounds like the soft stuff. And I could assure you it is the essential stuff. So, in three years at my organization, deploying this, just so you know, we went from being average or maybe below average in quality to winning the American Hospital Association quest for quality, Top Quality in America. We won the International Hospital Association award for the top leadership and management system. Our Net Promoter Score, just to give you ... like if 30 is considered good, it went from 62 to 82. That's higher than Google, Apple, Chick-Fil-A. I mean, it's off the charts because we did this and we took 35% off our annual Medicare expenditures, we were spending \$12,800 a year on Medicare patients. We now are \$9,600. And that's not counting inflation ... has been about 8% a year. So that's like a 50% reduction. We still ... it's still riddled in waste. But it just shows you what's possible, and it was all fueled by unleashing and inspiring people in this culture of love.

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CLAUDIA DOUGLASS:

Thank you, Peter, for being with us today. Thank you all for coming.

