



John Marchica:

Welcome to Health Care Rounds. I'm your host, John Marchica, CEO of Darwin Research Group and Faculty Associate at the Arizona State University College of Health Solutions. Here we explore the vast and rapidly evolving healthcare ecosystem with leaders across the spectrum of healthcare delivery. Our goal is to promote ideas that advance the quadruple aim, including improving the patient experience, improving the health of populations, lowering the cost of care, and attaining joy in work.

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Kim Ascitutto:

Today, John speaks with Dr. Thomas Young, board-certified family physician with more than 35 years of medical experience. He is recognized as an innovator and thought leader in the field of consumer-directed health care and population health care management. Dr. Tom Young is the Founder and Chief Medical Officer of Nview Health, an innovative software company that helps providers better identify, treat, and monitor patients with behavioral health conditions.

John Marchica:

Dr. Young, thanks again for taking the time today to speak with me on some important behavioral health issues. The magic of podcast editing, your bio will have been read in by this point, but I thought it's always good just to orient people to start off by saying, tell me a little bit about your history and your background.

Dr. Tom Young:

Okay. My history, I'm a Texas boy. I went to medical school in Texas, did some things, did some residencies, came back, got into teaching, started teaching down in Texas at Baylor, moved to Idaho in the late '70s to teach medicine and stayed here. Practiced family medicine. Worked in a lot of administrative roles, oversaw Medicare for many, many years in Washington, Idaho, and Alaska. Managed Medicaid here for six years. I've done some things in the entrepreneurial world along the way, but still actively practice. I manage a substance abuse clinic, a college clinic, and I provide some services in a therapy clinic as well.

John Marchica:

Great. So still very active. And then, today we're going to get into Nview in just a little bit. But that's good. I appreciate you giving me and our listeners that upfront background.

Patients, I was doing some research before this. I wanted to get a firm number. I saw a JAMA article that said patients with behavioral health issues tend to cost, I think it was a Canadian study that said to 2x your typical patient. I've seen other numbers that show three times as much the average patient due to comorbidities. And so my first question is, and I'm always thinking of this in a health system or an integrated health system standpoint, that's my background, my expertise. And it's been my sense that health systems have largely ignored this patient population. Not all of them, but a lot of them have largely said, "Well, behavioral health is for someone else," or "We're not going to put a lot of resources against that."

So my first question is, is that your experience? And if not, then tell me why not. And if it is, why do you think that's the case?

Dr. Tom Young:

Well, I think historically in this country, if we talk about the history of mental health in this country, for years and years and years back into the early days of the 1900 century, we put people with mental health disorders in institutions and we stigmatized all kinds of mental health disease. And then in the '70s, '60s and '70s, a sort of a new generation of folks came along and said, "We need to clean out all these institutions. And we're going to send these people out in the community to be cared for instead of in state or federally based institutions."

That was a dramatic change that kept rolling through society from the '70s on because now we had people in the community with serious mental illness. Again, stigmatized. Mental illness has always been more stigmatized than any other sort of health disorder, say maybe sexually transmitted diseases. Both of those sort of don't get high marks for treatment and care.

So the reality is it got pushed into the private sector. A lot of these people are in the Medicaid populations because of income and poverty levels. And so hospitals shunned it off to psychiatric hospitals. That's where these people belong. They don't belong in our medically based facilities. And so hospital systems paid attention to those things that got paid for. Rightly so. Those things that were extremely common and those things that we knew how to treat. And if you look back in the history of treatment, psychiatric treatment is still only medications. We're just now looking at new kinds of things, TMS, ketamine, psilocybin.

John Marchica:

I saw that article, was it last week or the week before? Impressive.

Dr. Tom Young:

Yeah. So now we're getting into the more neuropsychiatric kinds of treatment paradigms and starting to look at the brain and behavioral health in a different way. But hospitals are slow and catching up to that. And so fundamentally, most of healthcare, biggest percentage of healthcare, probably 80 to 85% of all diagnoses of mental health disorder in this country are made by primary care docs; pediatricians, internist, family docs. They write most of the prescriptions for these expensive psychotropic drugs. And unfortunately aren't tooled up to really make an efficient diagnostic system around that particular phase of healthcare.

So again, by hospitals focusing on those things that we know best, those things that we have treatment for, those things that are medically remunerated for. So we're getting closer in a systems world, because now we're reversing that saying, "Now we need to integrate behavioral health back into primary health care," for just the reason you said. Your numbers are spot on, even more specific for example, diabetes. Patients with unknown and untreated psychiatric or psycho-behavioral health disorders spend six times as much money as the same or equivalent patient who has either a treated or non-behavioral health disorder.

So we spend the money, but we spend it on the health side, on the payment side, if you will, payer side. Almost every person with a chronic disease has some comorbid mental health disorder. And when you say chronic diseases in this country, man, that's a lot of people. IBDs and hypertension, and COPD and renal disease all come with the person attached if you will.

John Marchica:

Right, right. So why is it the case, Dr. Young, that I understand why primary care would be the caretakers making the diagnosis to your point. Somebody comes in and they're in a bad way, we'll just say. If they're going to prescribe, why do they not then refer to a specialist in the same way that if I walked into my doc and I had out of control blood pressure, I mean really out of control, he'd probably send me to a cardiologist. Right? So why does that not happen? Why is it managed solely, as you said, 80% of the cases or plus by primary care?

Dr. Tom Young:

Well, I think one of the things, John, is that there aren't enough of the people that are really needed in that space, in that referral space. Let me give you an example. When I first came to Idaho many years ago, there were two in the entire state child and adolescent psychiatrist.

John Marchica:

Wow.

Dr. Tom Young:

Okay. I think now, I could be wrong, but I would guess maybe 12. Actually board certified child pediatric and adolescent psychiatrist. But again, psychiatrist in general are under-resourced in this country. We've tried to make better of that with telehealth. Tele-psychiatry is one of the first things to really get up and going in the tele-space, which was trying to cure the access issue. Because contrary to when I was practicing, for example, if I had somebody with a bad back, I could literally walk them upstairs to a neurologist who would see them. We would get an MRI. And if it was a surgical problem, we could fix it that day.

Now, if I had that same patient with out of control psychiatric problems, I'd be calling around trying to find a psychiatrist, number one, that took his insurance number two, if it was ever insured. Or number three, my only alternative was either send them to the ER, so that the ER would then have to put them in a psych hospital. So resources are entirely different for psychological care than they are for medical care.

John Marchica:

From a physician's perspective, do you think that the prevailing notion is still that mental health is over here, physical health is over here? That the prevailing notion is that we're not working with them in an integrated fashion? Or do you see that as changing?

Dr. Tom Young:

Oh, it's definitely changing. There's no question it's changing. I think that was the way it was for a protracted period of time. Even though in all my teaching years, I used to tell primary care docs, "Look, guys, gals, half the people that come in your office are not sick. And by that, don't necessarily have a physical illness that you're going to go, 'Let me listen to your heart. Let me take your blood pressure. Let me tell you what's wrong with you. Let me draw your blood.'"

So, that's been kind of the norm. We've sort of known that. And when you look at the numbers, one in five people in this country have significant depressive symptomatology. That's a lot of people.



That's a lot of people [crosstalk 00:11:19] on our doors. So I think we've sort of known it, but now we really are seeing more attention paid to it by systems, large systems. System providers are now focused on it. If you look at the EHR providers, Cerner, for example, really focused on developing products into the EHR space that help integrate behavioral health into those systems. So even the large system providers are now providing services that push us that way. So we will see that turnaround, but we still will be under sourced for some of the basic services like therapist, social workers to fill the gaps, peer support groups, substance abuse clinics to work in that space will still be a problem.

John Marchica:

So anecdotally we hear on the news that COVID-19 has caused all sorts of behavioral health issues, mental health issues, depression, isolation in kids as well as adults. What have you seen over the last year and what has been the response by the providers that you're connected with? Have they stepped up their efforts in any way to combat potentially an increase in these issues?

Dr. Tom Young:

Oh, absolutely. I think we've seen it in a number of spaces. As you alluded to John, children particularly have been impacted quite dramatically. Now we're really seeing not only activity, but action. For example, putting counselors in schools so children have access to that service. And don't have to be taken out of school, take somewhere, wait an hour, two hours. Mom misses work. We can do this inside schools. I know one of the school systems here locally has put a tremendous effort into that. Particularly now that they're bringing kids back in and they're seeing ramifications of social isolation in children.

We have seen employers and companies focus on trying to do some of the things. We've got new terminology for what had disease processes that have been created, for example, Zoom dysmorphia. And if you don't know what that is-

John Marchica:

I don't.

Dr. Tom Young:

I noticed very early on when my life changed from going to meetings and going out and meeting people and helping people in their practices, one of the things I noticed that I didn't ever normally do is look at myself. You look at yourself when you comb your hair and you brush your teeth. But Zoom dysmorphia has crept into the jargon for body dysmorphic disorder patients, people who are obsessed with problems. And we're starting to see that from people sitting in Zoom meetings, because in a Zoom meeting, I see you right here. And then I see me right there. And so this attention to the detail of our faces, what are our faces doing, what are our eyes doing, has created a whole new jargon, if you will.

And where that has come in. We've also seen new ways for people to deliver care. Not only just by tele, but by groups for example. Our company does what we call Zoom five o'clock after hour parties, every two weeks. So people that are seeing each other in Zooms all day can change that. And we've created ways to bring people back together. We've done strange things like we've got one coming up this week and I think it's hat week. So how many crazy hats can you get together for the cocktail party?

So even doing [crosstalk 00:15:33] seeing things done. And in the healthcare space, yes, healthcare providers have started to step up and look to assistance from computer-based therapy



programs that they can refer their patients to, certain apps that they can offer to patients that may be helpful. Mindfulness apps, that sort of thing.

John Marchica:

Just quick change gears and then I want to get into Nview. What role do you see the pharmaceutical industry playing? And obviously they're developing drugs, but do they have a larger role to play in the behavioral health space? Is there something more that they can be doing to improve patient care?

Dr. Tom Young:

Well, I think the pharmaceutical space is the mainstay at this point in time for what we do in behavioral health. There are a whole lot of new things coming. We alluded to earlier on the new psychedelic drugs. We've seen advances in drugs like ketamine, which is a fascinating drug when you think about the history of ketamine and its use. My use of it for years was in the emergency room, children that were traumatized, injured, broken legs, whatever. I could give them a shot of ketamine and I could take care of them. I didn't have to worry about low respiration or their breathing or any of those other things like it. I could fix a broken leg or go in and tie off an artery that needed to be fixed. But ketamine in itself, the other amazing thing I see now, people can come in wildly, wildly suicidal, get a shot of ketamine and an hour later not have a suicidal thought in their brain.

John Marchica:

No kidding.

Dr. Tom Young:

And so we've seen that drug go from an injectable format, IV ketamine treatment clinics for severe depression, and it works, to a nasal what's called S-ketamine. Now, does it cure all? No, but it's a really exciting adventure and really significant treatment improvement. These are refractory people that in the old days used to get ECT. But now we're doing that. We're seeing that with the psychedelics, the psychotropics. Some of the initial studies out of Johns Hopkins demonstrate you could have people who were alcoholics. And I mean, severe. They're drinking 15, 20 mixed drinks a day and still function working every day. And they go through psychedelic treatments, psilocybin treatment, in hospital two day treatment, they never drink again.

John Marchica:

That's amazing.

Dr. Tom Young:

So we're seeing new adventures in how the brain works. We're seeing new adventures in TMS, which is magnetic stimulation programs. So more's coming. And the pharmaceutical industry is driving a lot of that. And that's fortunate for us here in this country and in other countries. So yes, they're doing more because it's an area of need. It's an area of exploration for the neurosciences. We're learning more than we've ever learned before. Probably in the last 10 years, we've learned more about functionality in the brain than in the preceding 2000 years, if you will.

John Marchica:



Yeah. That's amazing.

Dr. Tom Young:

They're doing a lot.

John Marchica:

So tell me about Nview. And then before you do that, you gave me a remarkable statistic last time we talked. And you had said that 80 to 85% of the patients in behavioral health are handled by primary care. And then you follow that up with the statistic that was related to misdiagnosis.

Dr. Tom Young:

Well, and unfortunately in the primary care space, we've not provided our providers with the tools that let them be very accurate. We've provided tools like CT scans, MRIs, and lab tests, all kinds of things to be accurate in the physical health space, but we've really not handed them anything that they can easily do that gets them the correct diagnosis. And often some of the tools that they use actually lead them in sort of a wrong direction.

So, making a diagnosis, for example of bipolar disease, you say, "Okay, that guy has got bipolar." Well, the question is, is that bipolar one or bipolar two because they're treated differently. But that level of detail and that level of diagnostic accuracy has never been provided well to primary care docs. Primary care docs don't have in the current system, time, which is what it takes to understand people sometimes. You don't go to a therapist for five minute appointment. You go to a therapist for a 40 minutes appointment. You go to a doctor and the best you're going to get is five to 10 minutes. They're busy. They're trying to treat everything and everybody. so we haven't given them the tools. So they're inaccurate.

And that inaccuracy simply compounds the problem often. I get you started on something, okay. We hope that works. That's the wrong drug, you get worse. Okay, come back. Now, I'm down the road. Now I really have to find some help. And unfortunately in pediatrics particularly, family, practice, community health based systems, there's nothing there to help me make that diagnosis. When I was in practice, if I had time, I could talk to people long enough. And one of my professors used to tell me, "If you'll listen long enough, the patient will tell you the diagnosis." And when I had that time, that was great. But most the time I didn't. But I could get a chest x-ray, send them off for a chest x-ray, come back five minutes later, I can tell them what's wrong.

I can't do that with the behavioral health. Doesn't happen that way. I've got to spend the time. Somebody has to spend the time. So giving them tools in my evolution and in my life of trying to build things, I looked at that and said, "That's the problem. I'm not giving you the right tools. I can't expect you to build a terrific car and give you no wrenches and no car parts." You can't. So that's I think why we see that. It's not a fault, particularly. It's a reality of the world and we need to address that to help all of us in the primary care space, improve on that.

John Marchica:

So how do you do that?

Dr. Tom Young:



Well, I decided that there was a way and as I looked around at it historically, I looked at research. And I thought, "Well, we've got wonderful things that we do in research." And particularly, if you look at pharma. You take a pharma study and how does a pharma study work? Well, they get people and they have inclusion and exclusion criteria. Can you come in or are you out? And those are based on psychiatric diagnoses and a lot of psychotropic drugs. So how do they do that? They don't have 15 [inaudible 00:22:56] interviewing 135 people every day. They have tools.

And the greatest of those tools have been built years ago by a guy named David Sheehan, brilliant psychiatrist at Harvard, was the chairman of the Department of Psychiatry at the medical school in South Florida. Brilliant guy who built these tools for the pharmaceutical trial world to make these diagnoses and get them right and get them right 90% of the time without having to have five guys look at a patient. And have all the tracking tools and all the other tools.

And then as I looked into other spaces and research, there were guys who had all the tools, guys and gals who had all the tools in OCD, for example, and other anxiety disorders. And they were in all these trials that were going around, around the world every day. And I said, "Well, wait a minute. There's nothing over here." So I got with Dr. Sheehan and began to build the concept of, "I need to take these," and then with Dr. Goodman and Dr. Phillips and a whole bunch of other people [inaudible 00:24:01] let's bring these in, put them on a platform, reshape them, make them a little bit more usable, make them where I can send out a screener that's not just screening to find out if you have what level of depression you have. Send out a screener that helps the primary care doc know what kind of depression do you have? Do you have major depressive disorder? Do you have bipolar disease? Do you have PTSD? Not just you're depressed and good luck.

So I took those tools and started a company and said, "Primary focus of this company is going to be to get these ... I'll keep using them in research. I'll help my friends in research." And I used the money that we could make on that and started building something that we could hand to doctors, that we could put it in their EHRs or we could put it in a software product, or we could build some apps that would assist them in getting and using the same quality tools that are used by every research project on the planet. Our company now has projects going today on every continent. We probably have 30,000 plus tests around the world. We have it in every language you can imagine.

Why not have that here? Why not be able to take that, put a psychiatrist in the pocket of every primary care doc. And so that's what we've been doing. We've been recreating world quality scales into the hands of people who can use them every day.

John Marchica:

So if I get this right, I'm getting that initial screener and then I'm getting a questionnaire of some sorts. And that information goes back to you. So that as a primary care doc, when that patient comes in the door and let's say, I only have 10 minutes, I'm already armed with the information that's gotten me to the place where I can say, "Okay, well, based on your responses sounds like XYZ. And that I think we have a treatment for that."

Dr. Tom Young:

Yes, exactly that. I tell docs, "Look, this is the same flow that you do every day. You just listen to people, you get some basic information, you send them for some sort of testing, whether that's a CT scan or blood work or chest x-ray. This is a chest x-ray for your behavioral health. Now your armed, doc, when that chest x-ray comes, now your arm to say, 'You have pneumonia. You have viral pneumonia. You have

bacterial pneumonia. You have COPD." I know. I've got my choices of diagnoses, but I've got the right data in my hands.

And then secondarily, we're moving into a world where things need to be measured. We need to be able to say the outcome is improving. So we provide follow on tools so that when doctors come ... Let's say, I see you. And we decided you have depression. And we're going to put you on a medication. And you're going to come back and see me in four weeks. And I'm going to look at you and I'm going to say, "So how you doing?" And invariably, you're going to tell me, "Well, I'm better," because everybody wants to please their doctor. But the human animal only really looks back a couple of three days. Because if you ask most people what they had for breakfast a week ago, they have no clue unless you're like me and it's the same thing every day.

But the reality is in these trackers allow physicians, therapists, and others to see what's going on in between. Is John really getting better? Last week he was really good. And that week before that, a little sketchy, maybe. So now I know to how to begin to change my treatment and accelerate the improvement process, if you will.

John Marchica:

Does that mean that I'm getting an email like once a week or-

Dr. Tom Young:

Be an email once a week. It could be as simple as what I do with my college students, because college students, one thing that drives them, particularly freshmen is loneliness. So I can send out a thing that comes out on one of their smart watches anytime during the day and say, "How lonely are you?" And they can hit a button and it says "Six." And I can use that three or four times, and I can start to plot their day. So now my therapist can help them figure out, "Well, now this is the time of day you usually feel pretty lonely. Let's see what we can do. Can we add an activity?" So we can make it as simple as touching your watch. Some of the things we're working on, we can make it as simple as you don't have to touch your watch. Just hold your phone out in front of your face. And it'll tell me your blood pressure, it'll tell me your blood sugar, it'll tell me your heart rate right off the picture on phone, selfie on the phone.

And there are other tools out there that are beginning to be perfected that we're working with that can actually help people know how they're doing on a particular medication within the first four days. Normally we say four weeks. So we're getting better at following and tracking and assessing and putting that information back into the patient to say, "Hey, John, you're really are getting better," because one of the things we know about humans is we want to get better. A lot of times we just don't know. We don't have the perspective to see how we're doing. But if you can give people the perspective, they like it.

John Marchica:

One of the last questions, then we'll be able to wrap it up. I'm wondering in the world of value based care, everybody is looking for outcomes. And you've talked about the data that you gather. I know the company is relatively young. Have you been able to yet track, let's say, one system that has implemented your process and all of their primary care sites, and then another health system that seems very similar, but is not using that and to do any kind of comparative study or ROI? I'm just curious as to what you have.





Dr. Tom Young:

We're in the process of that now. When I started this in late 2016, it took about a year and a half to really get the systems built. And we have a lot of customers now. And that's exactly what we're starting to do, where we're able now to start to look at some of our systems groups that put our tools into place and say a telehealth program, we can demonstrate increased effectiveness, more rapid diagnoses, shorter times to improvement. As opposed to people who are doing what we used to do, which is you come in, you give me your basic history, I spend three visits trying to figure out what's going on with you. And then we see where we go. I don't really know if you're getting better. I give you the medicine. I don't really follow that along closely. You come in and you tell me you're better. I go, "Yay." I feel good. You feel worse.

We know we're improving over that. We're getting good data. And we're talking to people now about how do we crunch some of that data. We're talking to some of the biggest EHR companies on the planet, not just in our country, because we do this not just in the USA. We have clinical folks all over Europe. Australia's a big user of our stuff. Australian folks do a lot of measurement based care. And they tell us that. They give us the data from their before and afters in terms of outcomes.

Right now, we're rolling out the entire country of Estonia for example. Every hospital and every doctor. That's not a huge country, but it's a cool little country. But the reality is now everybody's going to have it. They're all going to have access to it. We don't have to prove measurement based care works. We know that. That's been done by lots of people over lots of time. And the outcome of measurement based care is value-based payment.

So we know that the reality for the payers is this system and they see it works better than not doing anything. And so we're starting to get that drive from the payers to say, "How do we get this out to people? How do we make it better? How do we, the payer, drive this?" And in some cases, working with unions who are self pay. They're starting to see that. And they're starting to do that with some groups now with us that want to use this stuff to help their members. They know it works. They know it drives cost down. We've proven that. So, yes, we're doing that. And we're going to keep doing that because that's important. That outcome data is valuable.

John Marchica:

Ultimately, if I'm a payer, I want to see total cost of care go down, right? I'd want to look at my patients that are being treated for behavioral health and let's say diabetes, and track that patient over time, now that we've implemented this program for our primary care docs to watch total cost of care decline. That would be amazing.

Dr. Tom Young:

Well, and I think we will see that. I think when you integrate behavioral health ... One of the things that we've noticed, particularly when you look at larger, when I used to look at the data sets for my Medicaid program, the number of visits a person makes with a primary care doc before they make the diagnosis of a behavioral health disorder and then after. And it's very dramatic because the game afoot, when I have a behavioral health disorder and I'm stigmatized, and I don't really want to talk, I keep coming to see you until you get it right, until you asked me the right question.

John Marchica:

Interesting.



Dr. Tom Young:

[crosstalk 00:34:06] the diagnosis. The other pieces of the data, show us for example, the mismatch. Almost 50% of people who successfully commit suicide saw their primary care doctor within 30 days. Just in terms of costs to humanity, that's huge.

John Marchica:

Right, right.

Dr. Tom Young:

That's an enormous number. And that's not just here. That's not just US data. That's worldwide data. European data, Australian data, other significantly health driven countries, Canada. We're doing a lot of work with Canadian state-based programs around correct diagnosis, tracking, following, reducing costs, predicting risk. One of our programs is working with finding people in the police officer world and being able to predict when they might be getting into a crisis problem. When that PTSD may be getting too bad. When those underlying disorders that we see in first responders, it's being able to predict that with just some very simple tracking tools into those populations.

So there's a lot of good that can come out of what people say is, "Well, it's pretty simple. We'll just ask them those questions." But the reality is if you congregate the data right, you get data, and then information, and then hopefully wisdom. And that's kind of what we're driving. We want to add some wisdom to the [inaudible 00:35:45].

John Marchica:

Right. Yeah. We would say in my business data information leading to intelligence.

Dr. Tom Young:

Yeah.

John Marchica:

So Dr. Young, this has been great. I appreciate. The topic is interesting and I don't cover it enough. Like to have more discussions of the importance of behavioral health. I think Nview is a fascinating company and let's keep in touch. I want to see how things progress and wish you the best.

Dr. Tom Young:

You too. And come up here and go fly fishing with us up here in God's country some time.

John Marchica:

Oh, Idaho is beautiful. It's been years since I've been there, but as a beautiful state. Yeah.

Dr. Tom Young:

Absolutely Take care, John.

John Marchica:



All right. Take care. Thank you.

Kim Asciutto:

From all of us at Darwin Research Group, thanks for listening. Health Care Rounds is produced and engineered by me, Kim Asciutto, music by John Marchica. Darwin Research Group provides advanced market intelligence and in-depth customer insights to health care executives. Our strategic focus is on healthcare delivery systems and the global shift toward value-based care. Find us at [darwinresearch.com](http://darwinresearch.com). See you next round!