

Primary Care Cures

Episode 91: Morris Miller

Ron Barshop:

This episode is brought to you by the MediSearch Institute. What happens when patients cases become too complex to solve in a typical 30-minute visit? Well, we've all had those super thick, super deep patient history nobody's looked at in a long time and gone back through. Well, I'll tell you what happened is those patients bounce around from doc to doc without getting any answers or making any progress. These patients are trapped and lost in a maze.

Ron Barshop:

Well, MediSearch is here for those doctors and for those patients. Their motto is we solve the unsolvable. Their process is rather simple. Dr. Trent Talbot, the founder, assigns a team of medical detectives, typically three MDs and one PhD to each case. They research the latest breakthroughs and clinical trials and they elicit the opinions of 10 to 15 world-leading experts per case. They purposely seek out experts who will come at each case from a different perspective, the Bayesian method. Altogether, they will put in over 250 MD hours for every case. That means 500 times the amount of brain power that typical doctor can afford to offer.

Ron Barshop:

You know most problems in health care are fixed already. Primary care is already cured on the fringes, reversing burnout, physician shortages, bad business models, forced buyouts, factory medicine, high deductible insurance squeezes the docs and is totally inaccessible to most of the employees. The big squeeze is always on for docs. It's the acceleration of cost, deceleration of reimbursements. I want you to meet those in this show that are making a difference. With us, Ron Barshop, CEO of Beacon Clinics, that's me.

Ron Barshop:

Last month my partner and I broke down an Aetna claims desk that counted 51 steps that it takes about three to five people to submit a clean claim if you're a physician. That's how physicians are paid, is filing lots of clean claims with zero errors. Getting pre-authorizations to even submit that clean claim. 51 steps. If you review this show, I'll bribe you and I'll send you the flywheel we created, this an amazing and shocking game board, what it takes. So it's not going to generalist, Trump's specialist. And you're a total bureaucrat generalist if you're a doc and you're supporting a big system that denies care within the standard of care, within customary unusual care. Denials happened every second of every day. However, these scrubbers mission statements seem to read, deny, defer, delay.

Ron Barshop:

Claim scrubbers clean claims before they're submitted to insurance companies, but physician scrubbers work for the companies and are also known as peer reviewers. They work from home for [bigs 00:00:58] and they scrub care with the power to deny, delay, defer. Is this legalized accessory to murder sometimes? Dramatic pause. Okay. On most occasions the peer reviewers

unqualified to make the assessment about the specific services. They aren't true peer reviews for about 55% of our claims because that's the number of claims that are specialists claims. They usually have minimal or incorrect information about the patient and no one has examined or spoken with the patient on the insurance side like the doc has. None of them have a long-term relationship doctors do, especially PCPs.

Ron Barshop:

The insurance companies will say, this is to make sure that patients are getting the right medication, the right tests, the right treatments at the right time. It doesn't. It's a process focused on quarterly insurance carrier metrics, bonuses and volume are literally tied to compensation for these scrubbers. So as long as scrubbers exist, too many patients will fail to get the medications they need, the treatments and the tests. I've met two PCPs who scrubbed claims. One of them is a very good friend. Guess what? They're paid, as I said, by volume and by percentage of denials. And there's little to no quality control over their pre-auth denials. And the appeals, well, they're a joke. There is an appeal's process, but nobody goes to the caregiving end of the appeals because it takes enormous amount of time and it's not worth it, especially if you're waiting literally to get a medication that day.

Ron Barshop:

So, let's call this whole claim system exactly what it is. It's foisted on us. Let's call it a hot furry coat in the middle of July, something nobody likes and is for the verges. Today's guest, we spoke with before C-19 made landfall in the U.S. We recorded Morris Miller, CEO of Xenex, on January 15th. His company sells robots to disinfect, mostly hospital rooms, but also airlines, schools and other facilities. And they thoroughly bath the surface of the rooms you stay in and the operating rooms in a broadband spectrum xenon rays, which destroys these killer pathogens, like C-19, like C. diff and like MRSA, which we talked about literally on the last show. So, I so welcome you back, Morris Miller, to the show.

Morris Miller:

Thank you Ron. Nice to talk to you.

Ron Barshop:

So it's been nine months. Let me just run through a quick timeline. On January 15th, we spoke and recorded the show we issued in a week later. On January 11th to 17th, the Chinese Communist Party met at a place called Wuhan. Most of us have never heard of. Woohoo. Who cares? Wuhu what? Except the Wuhan Health Commission insists that there were no new coronavirus cases which is a brand new emergence at that time. January 13th, the first coronavirus case was reported in Thailand, the first known case outside of China on the same day that that commission issues the no spreading. And then on January 14th, the World Health Organization announced the Chinese authorities have seen, "No clear evidence of human to human transmission of the novel coronavirus." January 15th, patient zero leaves Wuhan on a flight and arrives in the United States the next day, carrying, of course, this coronavirus. So that's the day you and I spoke last.

Morris Miller:

Wow, incredible time.

Ron Barshop:

Yeah. So, wow, I mean, it's true, so you are nine months pregnant now with basically as much volume as you can handle, as many robots as you can get out. But tell us what your journey has tend to last nine months, because it's literally nine months I go tomorrow.

Morris Miller:

Well, I feel like it's actually almost nine years or 10 years to give birth to this company. The COVID crisis and SARS-CoV-2 really brought this to everybody's attention. And suddenly, we saw a propel hospitals around the world to make purchase decisions that they had considered before but hadn't necessarily pulled the trigger. So, our business has dramatically increased and I frequently I'm proud of the team. Irene Han, who works with us, she stated the best when one of the employees was talking about the numbers of sales, and she said, "Normally we would celebrate an increase in sales like this." She goes, "But I got to just tell you, I'm humbled to be able to offer a solution to as many people around the world as we can with the right product at the right time in the right place."

Ron Barshop:

Morris, there's so much more to this story I want to explore with you. So last time we spoke, I'm going to give you a couple of quotes. One of the things you told us, the killer pathogens are killing 300 daily, that's 109,000 a year. And another 6,000 daily are getting infected with these killer pathogens, mostly in hospitals. And there is some small percent of those working with farm animals, but those numbers are way low now. Aren't they?

Morris Miller:

They are. I mean, even if you look at the number of deaths from SARS-CoV-2, or COVID 19 that's caused by SARS-CoV-2, you're standing in the United States about 200,000 since this pandemic started, that's really over the last nine months. That's double the rate of infections that we've normally seen, because normally the hospital-acquired infections, MRSA, clostridioides difficile, VRE, acinetobacter, they kill about 100,000 people a year. So it's already double. Those other pathogens and infections haven't necessarily gone away except for the fact that the hospitals are a lot less occupied right now. So perhaps there's been some lower level of those other normal infections just because the hospitals have been so preoccupied with COVID-19.

Ron Barshop:

I know you're a student of hospitals sanitary conditions and sanitary procedures, which includes how you use an autoclave and how you process the surgical equipment, how you wash your hands, simple things. Those I'm going to imagine have been heightened massively by this crisis. Is that a good guess?

Morris Miller:

Yeah. I think everybody was aware of the CDC guidelines for infection control. Jayco is the organization that audits hospitals to make sure that they're accredited to stay in business, as hospitals that focus on infection prevention is probably 10X what it was before the SARS-CoV-2

crisis began. And that includes, like you referenced early in the show, not only surfaces, but also air and just the regular gloves and gowning that physicians and nurses and housekeepers have had to do for decades.

Ron Barshop:

So, you told me on our last show, Morris, that you had 33 peer reviewed studies that said this technology is pretty cool, that it works. And you scratched your head and you said, "What do I need? 34 just to completely sell." I mean, many administrators have to think about it with overwhelming evidence that this robot works. Did you run out of robots to ship out? I mean, what happened to your supply chain? Did you figure out how to solve the massive demand that popped up overnight?

Morris Miller:

Yeah. We didn't solve the demand overnight. First of all, we're now over 40 peer reviewed studies. Even since we talked to you last time, Mayo Clinic just published another peer reviewed study. And I think one of the things that propelled the company was early in the crisis. When we realized that SARS-CoV-2 was coming over, we went to the Texas Biomedical Research Institute, which is led by Dr. Larry Schlesinger, and just asked them, "Can you get SARS-CoV-2? We remember the Ebola crisis, where we weren't able to claim that we could kill Ebola because we didn't have possession of it." Dr. Schlesinger and his institute, they got ahold of SARS-CoV-2, they brought it into the institute, they crew it.

Morris Miller:

We gave them a robot that we're not going to be able to get back for a year because they wanted to quarantine it. They independently tested it, they published the results. So in early March we were able to announce with absolute certainty that we kill SARS-CoV-2 in two minutes. So we kill the pathogen that causes COVID-19 on surfaces in two minutes. They also tested it against three masks. And while we don't advocate for using it on masks, because we'd rather have the hospitals give the housekeepers, the nurses and the doctors fresh masks, they did prove that it worked on masks as well.

Ron Barshop:

No surprise there. I can't imagine it's not going to work on any surface.

Morris Miller:

No, that's correct. Well, there might be some. I've been scanning, but there might be some. And then in terms of production, as the orders increased, we just began increasing our supply chain as fast as we could. And it was interesting to me, the core components that make us different, the things that we make, we were able to keep up. It was things that you would never expect. Like we have special clips that make sure that when the robot's being banged around the hospital, that it doesn't fall apart, it doesn't rattle, that it's a reliable machine. And globally, when companies saw that the pandemic was coming and they started panicking that they weren't going to be able to get spare parts, they started buying all of those clips. And when you have a product that's approved by Enertech for a purpose, it's literally authorized with all of the components that are in there.

Morris Miller:

So it was these tiny little components that you would never even give a second thought to it. It's a 5% clip. And yet if you can't get that clip, then at least in theory you have to go get it reauthorized. And to the credit of many Americans, I would call the CEO of companies and say, "Listen, I understand from the manufacturer that you bought a million of this, we have a life saving device, I need 100,000. Would you please sell them to me?" And sometimes they would sell them to me and sometimes they'd say, "God bless you for what you're doing," and they would just ship them to me. I mean, it's really an incredible company. A country that we live in and people would often be surprised at the large yes and generosity of people in the face of a crisis. But I was consistently proud and impressed with how cooperative everybody was.

Ron Barshop:

So I want to keep the discussion on healthcare, but there's two questions I have unrelated. You and I are friends with Roy Terracina, who had a unicorn event like this. The Operation Desert Storm happened to his Sterling Bakery and suddenly, the defense department said, "As many of these nitrogen packed breads you can make and cakes you can make, we will take." so we quadrupled his factory size, bought all the land, parking around him, quadrupled his labor, went to three shifts and he just pumped out as much bread as he could. And that happened to you. Have you ever experienced something of this dramatic, this short-term of growth? I know you've been involved, of course with Rackspace, but it wasn't even like this. Was it?

Morris Miller:

No. This was becoming like Rackspace year seven overnight. And I'd consistently told the team, I said, "It takes 10 years to become an overnight success." And when you look at when we founded the company and when this hit, it was like 10 years and literally it was becoming an overnight success. And I have to credit the team under Roger Mark's leadership, manufacturing came in, they ran multiple shifts, they worked day and night, they worked weekends, for not a week at a time or two weeks, but for months at a time to produce as many robots as they could to meet the demand. It would make any leader of any company proud.

Ron Barshop:

Yeah. My second business question is 3D. We interviewed a gravel bike manufacturer, the best in the world in Italy, who's in EO, where you and I met. And he overnight had to start 3D printing parts for his bicycles because they couldn't get supply chain anymore from India and China, and Israel. So did you have to do the same thing? Have you accelerated your 3D printing plans yourself so that you don't have to rely on outside sources?

Morris Miller:

We didn't use 3D printers to produce the actual parts for the robot. We did use 3D printers to produce prototypes of alternative materials and then we had to ship those out to metal manufacturers or to plastics manufacturers to get them made. So it definitely sped up the redesign process that allowed us to meet demand or to attempt to continue to meet demand. So 3D is not in the robot itself, but it absolutely sped up product development.

Ron Barshop:

So how long does it take to produce a robot and then how long does it take now nine months later?

Morris Miller:

It's really not that much different. I mean, if you have everything in-house, if you have all of the parts lined up, somewhere between eight hours and 16 hours to put it all together because you're doing the final assembly, that doesn't include the cabling assemblies, it doesn't include producing lamps and all of the other things that we make. So all told, it's hundreds and hundreds of hours, but the actual assembly time, the final assembly hasn't changed that much. Other than, I think the supply chain innovations that we did actually did speed up how the assembly line was organized. There's some famous car manufacturers that you've probably heard of that are experts in assembly and in designing assembly lines, and they were very gracious and generous with their time and counsel to come in and help us. Again, it's just an example of how when there's a crisis, Americans just pulled together to make things happen, even if they're just helping out a neighbor.

Ron Barshop:

Okay. So back to care again, when we look at the reasons you were told no, they obviously didn't have budget for it or they just didn't have time to think about it. Wasn't a priority. Of course, neither of those are an issue now because the CARES Act gave a Marshall Plan to the hospitals of \$175 billion. And many of them didn't need it. We've seen public company reportings for the last two quarters now, coming up on three, and they were profitable during this crisis because they made up the difference with other services, particularly outpatient and outside services that aren't in the hospital. But what I'm seeing is they can no longer tell you that we don't have budget for this when they were just awarded tens of millions of dollars for the big systems. Have you even gotten that issue coming up at all?

Morris Miller:

I still hear it from certain hospitals, for sure. The hospitals that were going to buy, that wanted to buy, I think the dollars that they got, the CARES Act dollars, made it easier for them to make the decision to just push forward and get it going. And the hospitals that were recalcitrant and that used economics as a defense mechanism, I think that they continue to do that.

Ron Barshop:

Okay. So you're a private company, I don't want to ask you a question related to your volume, but you are doing mostly medical related volume. How much of your volume roughly now is attributed to say casinos and the leisure industry, airlines, et cetera?

Morris Miller:

Our base has grown. So, on our old base it would have been 50%, on our new base, it's in the 10% ish range. I don't know if you saw the Carolina Panthers are now a team. I think you'll see some other professional sports teams that are going to be using the robots. We know that we're out doing demos since the Panthers announcement. Similarly, we started with the Western Hotel in Houston, then we got the Waldorf Astoria, and then we got the Beverly Hills Hilton. So we're seeing adoption in hotels. The Paramount Miami Worldcenter is the number one luxury apartment complex in Miami. So we're seeing adoption in luxury high rises. So all of these little

niches keep expanding and growing. And once somebody heard that we just, I can't say which one, but we just sold an entire school system, because they really wanted to get their kids back in school and they have a very aggressive disinfection regimen that they're following to make sure that they can have kids in classes.

Ron Barshop:

Well, when life was a little less hectic, you told us in Oklahoma story about the school system that had a virus that kept everybody out of school and you came in with robots and cleaned all the surfaces in bada bing bada boom, virus over.

Morris Miller:

Absolutely.

Ron Barshop:

Yeah. Great story. So Morris, this is quite a ride you've been on. And I understand when your employee says that it's been a bittersweet ride, but does this change anything about the way you grow your company? Is this, are you going to lower your prices so you can start going after volume now? And what is your game plan going forward for Xenex?

Morris Miller:

So one of the interesting things that the team came to me with during the crisis is even, so sometimes there were places that would lend us parts or give us parts or sell us parts, but there was other things like, I remember there was a fan in the robot that we use and normally it might cost us \$35. And all of a sudden we were paying \$175, and this happened across multiple, multiple components. And the team came to me and I talked to them about, "What are we going to do on pricing?" And I was really proud because they said, "Look, the one thing we're not going to do is raise prices." So even in the face of a pandemic and a shortage, we never raised prices even when our cost of goods sold dramatically increased. So I thought that that was good.

Morris Miller:

In terms of going after the markets, we're still focused on healthcare. That's where people are getting sick, that's where they're dying, at least where they can track it. So we're still focused on healthcare. We're going after all those hospitals both in the U.S., and now about 30% of our business is outside the U.S., so we're going outside the U.S. And then all of the other markets we're looking at, and we're working with leading thinkers who are adopters to expand their adoption, like Waldorf Astoria, or Collegiate Sports and other places to see, can we get them to make this ubiquitous so that they can protect their students, protect their athletes, and really create a healthier community, and most importantly, get people back to work.

Ron Barshop:

So I can't wait to see these robots get into the primary care market. Do you envision a secondary market where somebody gets a used robot to use in primary care for lesser cost, or maybe for a least cost or rental cost? Is that a something that'll develop now that you have so much volume out there?

Morris Miller:

I think the way that we've approached that is we rolled out a new service called Strike Force. So everybody's not on, I don't know if everybody, but many people know about software as a service, we call this disinfection as a service or zapping as a service. And we have been going out to restaurants, car dealerships, all sorts of businesses. Really, we've seen a lot of polling, Houston, San Antonio, Austin, Dallas, for businesses that can't afford a robot, but they can afford \$400 to have somebody come out and really disinfect spaces.

Morris Miller:

We've gotten to the point where we can disinfect somewhere between 5,000 and 7,000 square feet per hour per robot, by optimizing it because we're training our own people, but it's really disinfection as a service where we can go out and meet the needs of businesses or institutions. It started, there was a nursing home where they kept on having deaths and they kept on having infections. They needed a solution. That's where we began, just outside of Houston and it's expanded from there. So that business is growing fast on its own. That's really the way that we're addressing secondary markets that need the service but can't afford a robot.

Ron Barshop:

My son-in-law's in the anti-microbial business, they do building maintenance. So they spray down rooms for the same kind of clients you're talking about, but they're spraying down the rooms in high traffic areas and you don't know how reliable it is. It's like the same thing with the maid services in the hospitals. You don't know how reliable. They're doing the best job they can, but they're in a hurry. But they charge about the same amount for the square footage. So, I would much rather have a bathed ray of light than have somebody spraying a surface possibly unevenly for the same price.

Morris Miller:

Yeah. The lead maintenance person, janitor, at the school system was talking to me and he said, "Look, the way we always look at it," he goes, "We've been pretty good at getting rid of the dirt that we can see." He says, "You're getting rid of all the pathogens that we can't see." And I think that's really the role that we've always served in the hospital. We've never said, "You're not going to clean it." So even using an electrostatic sprayer, that's fine. Do that first if you want to and then bring in Xenex that's not going to miss the spaces that chemistry will miss. And between those two, we can really solve a problem.

Ron Barshop:

Well, I'm sorry that you had to grow during a crisis, but I understand how joyful it is to see the adoption rate, because this is really going to move the dial over the long-term for MRSA and C. diff. We're going to have Jeanine Thomas on our show in a few days and I think you know her. She's with the MRSA Survivors Network.

Morris Miller:

Yeah.

Ron Barshop:

It seems to me that now that you're going to have this high adoption, you're going to be able to drive down MRSA and C. diff, and the other things we talked about on the last show that are really more of a long-term chronic problem than even the coronavirus, because this'll come and go. The strain will define itself by disintegrating to the main. It'll get lighter and lighter and less of a burden to the point where it's not affecting anybody. Before maybe even the vaccinations come out. So the longer-term issue you have are these resistant, these penicillin, methicillin resistant. I guess we have viruses and we have spores. So that is really the long-term effect of this pandemic for your business, is that the rooms are all going to be more sanitized on a much larger scale now for these other conditions.

Morris Miller:

Yeah. We saw this in Italy where they bought hundreds of machines, and we're already working with our partners over there to redeploy them to go after the pathogens. Like you just said, clostridioides difficile, methicillin-resistant Staphylococcus aureus, vancomycin-resistant Enterococci, all of the pathogens that have normally been a threat, they're now going after. And the blessing in disguise hopefully will be that, three years from now, they'll say, "Wow, we used to have a hospital-acquired infection problem, now we're killing the pathogens that would have otherwise made our citizens sick and that's not happening anymore."

Ron Barshop:

And hopefully the hand washing is getting more routine. Morris, it's always great to catch up with you. What a ride, man. As I said earlier, and what an amazing story you have to tell. The last one was great. The timing was incredibly amazing. And now here we are, on the other side of this thing, hopefully, with a happy story and a happy ending for the long-term for everybody who goes to hospitals.

Morris Miller:

Thank you Ron. I really appreciate it. Always good to talk to you.

Ron Barshop:

Yeah. And is there any message, if you could fly a banner overhead, you've got this last time, that you would send out to all those listening, what would your message be?

Morris Miller:

It would be, I really want them to follow the CDC guidelines, I want them to socially distance, I want them to wear their masks, I want them to wash their hands. Don't touch your eyes. Really, if everybody would follow those simple rules, I think you'll see a drop in the passage of this particular pathogen and hopefully we can see a die off and get America back to work. So I really I want them to follow that and then a meantime, we'll do everything we can to disinfect surfaces, wherever they're going. And hopefully we can have a safer and healthier society.

Ron Barshop:

That's awesome. Morris, before we sign off, how do folks reach you or find Xenex to engage for one of these machines?

Morris Miller:

If they want to email me, it's morris.miller@xenex.com. And anybody that wants to call my cell, can call my cell, 210-273-6768. I'm happy to discuss or help in any way I can.

Ron Barshop:

Thank you, Morris, for being on the show. We look forward to talking to you again real soon.

Morris Miller:

Likewise. Thanks Ron. Okay. Bye-bye.

Ron Barshop:

So welcome to just a hospital minute. We are adding these segments for one minute at the end of every show to tell you some of the games that hospitals play.

Ron Barshop:

Soft medical admission is what they call patients that are admitted to paid revenues. 80% of CEOs at one hospital system made their bonus last year at the end of the quarter four. So they'll obit at normal heart reeds and arrhythmias that aren't necessarily admitted. Normally, they'll do what's called aggressive admissions at the end of the quarter to make bonus. One system paid huge fines to CMS in 2014 for this very practice called soft medical admissions. So this is just another a hospital minute.

Ron Barshop:

Thanks again. Thanks again to our sponsor, the MediSearch Institute. I want to read you a note a CEO friend of mine sent me who used them for a rare childhood disease her daughter had. Dr. Talbot's research was thorough. He provided clear paths of treatment and he gave me access to the best physicians. I'm so grateful for his work. That's the MediSearch Institute.

Ron Barshop:

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