

Oklahoma Innovations Radio Show

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Guests: **Noah Roberts**, CEO, Docvia

[Music]

>> From the OCAST Radio Network, this is *Oklahoma Innovations*, a weekly science and technology radio magazine brought to you as a service of OCAST, the Oklahoma Center for the Advancement of Science and Technology. OCAST is the state's only agency whose sole focus is technology, its development, transfer, and commercialization. OCAST mission is to identify and fund promising research in technologies that allow Oklahoma to compete in a global market economy from our own backyard. This program features some of the state's most gifted and talented scientists, inventors, entrepreneurs, manufacturers, and business leaders who all have one common goal, developing technology-based economic growth for all Oklahomans. Now here are your hosts, Gary Owen and Steve Paris.

>> Welcome, welcome, welcome to another program of Science and Technology. And my name is Gary Owen.

>> And I'm Steve Paris.

>> And you are the OCAST man. I'm going to start calling you the OCAST man.

>> Whatever.

>> No?

>> I'll answer to anything Gary. Welcome home, Gary.

>> Well thank you, I came home.

>> You've been away.

>> I have been away. I went to Germany. And those who are listening to this show in the mornings, because we have different affiliates that run the program at different times on the weekends, but if you're listening in the morning and you were in Germany I would say Guten Morgan.

>> Guten Morgan.

>> Guten Morgan, yeah.

>> Well.

>> That's one of the big German words I learned last week.

>> And what were you doing over there?

>> There is an organization called SIFE, Students in Free Enterprise. And it is an organization with a lot of big corporate sponsors. Wal-Mart is one of the big guns involved with SIFE. And this is an organization that teaches students about entrepreneurship. And the SIFE teams from different universities from around the country compete for the national cup. And then they go to the world cup where they compete with countries from around the globe.

>> Really?

>> So this year's world cup was in Germany. And I encourage you to read about SIFE. It's a fascinating organization. Basically these university teams go into whatever region they're in and do something with non profit or some organization that's in need and they do economic development projects. And then they take those projects to competitions, show these CEOs from all these big corporations what they've done. And they compete for a big prize.

>> Outstanding.

>> Yeah, so anyway, I was the announcer for their event.

>> Wow.

>> So quite a, quite a project. So what's going on at OCAST this week?

>> Well, I'll tell you what, there's a lot going on. But before we go into that, I want to talk to you about, a little bit about our guest today.

>> Absolutely.

>> Let me just say it this way. If you're, say for instance you have a medical problem or you have, you're in an automobile accident and you get picked up by a local ambulance service or EMSA and you know these, these paramedics, maybe the first time probably the first time in their lives they've ever seen you. They don't know anything about your medical history.

>> That's right.

>> Wouldn't it be good if they could know something about whether you have diabetes, whether you have any other afflictions and so they, they might better be prepared to help you overcome the situation you're in. That's what we're going to talk about today. It's, it's a company called Docvia and we're going to hear more about it here in just a little bit.

>> So basically medical providers having access to your medical records.

>> Well, don't you think that would be important?

>> That would be, could be a life saving deal.

>> Why in many cases I'm sure it would be and we're going to hear more about that in just a minute.

>> So, in the OCAST calendar of events, what's going on?

>> Oh wow. You know we don't have any huge events scheduled right now, but the normal operation, right now we're, we're gearing up for obviously many of our solicitations are always underway. So we're going through workshops, we're helping people learn how to apply for our funding. We're working with our strategic partners, the Oklahoma Manufacturing Alliance and i2E, which stands for Innovation to Enterprise. And those organizations always do a great job of, of carrying out the mission under contract with us. That goes back you know the better part of, the, the manufacturing alliance case it goes back to 1992 when they first started.

>> Wow.

>> And of course i2E started out as the Oklahoma Technology Commercialization Center, still exists. It's still called that officially, but they've changed their name some years ago to i2E.

>> More of a branding position.

>> More of a branding situation. They've done a great job with that. And they started it about 1998, officially got started I think in full force in 99 and so they've done a tremendous job over the last 10 years or so. And that's kind of where we are. And of course you know the legislature will come back into session in February and they will want to know what we've been doing with their money, the people's money in the last year.

>> And can you tell them?

>> Well of course we're going to tell them. We're going to give, as a matter of fact, we'll probably tell them more than they really want to know, but that's.

>> You've got some great success stories.

>> We do have great success. And some of them are featured, many of them are featured on this program and Docvia is one of those companies that OCAST and i2E have had a history with for some time now. And we featured them about four years ago in our Impact Report, our annual Impact Report. So we feel very good about what's happening with Docvia. You're going to hear more and I think you're going to feel good about it too when you hear about what services are, are available.

>> I need to feel good. I came back with some respiratory infection.

>> Yeah, you did.

>> I usually get it this time of year, everybody that has listened to this program for the 14 years knows in October, November, I'm going to sound like this, there's just no way around it.

>> Hey, did you hear about the Governor's mansion was going to get a wind energy system?

>> You know I did, I thought that was a very, in fact, we're the first state in the union to do this.

>> That's exactly right.

>> Tell them about it.

>> You bet. Officials plan to install a wind turbine at the Governor's Mansion in Meg, Oklahoma, the first state as you indicated to partially power its Governor's residence with wind power. You know the governor's mansion is a pretty good sized place.

>> It is.

>> I don't, I've forgotten how many square feet, but it's bigger than the average home. The Department of Central Services has said it will soon install a 10 kilowatt wind turbine on the mansion's grounds. Here's the fun part. Bergey Wind Power Company of Norman, one of our clients, we have helped Bergey Wind Power many years ago get some small business innovation research awards from the federal level. Anyway, Bergey Wind Power and it's own Michael Bergey are donating the turbine to the state.

>> No kidding.

>> Yes and providing installation and maintenance free of charge. The company has been in business for more than 30 years. By the way it was founded by his father Carl Bergey who has an interesting history. They, they expect to generate about 13149 kilowatt hours of electricity per year. The project is part of an effort to cut energy costs and make government buildings more energy efficient. Carl.

>> Isn't that something.

>> Carl Bergey used to work with Piper Aircraft. He and Pug Piper and Carl White, the three gentlemen are the three people who designed the Piper Cherokee series aircraft of which there are 46000 that were, were constructed. That doesn't sound like a large number when you think about cars. But when you think about personal aircraft, 46000 is a huge number of airplanes and many of them are flying around the world as we speak.

>> That's interesting stuff.

>> Out of Norman, Oklahoma.

>> I brought back something fun for you. The, the newspaper is called the Frankfurter Rotenshow and I wish this was television because on the front page, big picture of fiber optic lights. And then you open up into one of the big sections and folks I brought this for Steve and he hasn't even seen it yet. So if this was television, he would get a big kick out of this. But they're showing on one of the stories on the inside page here, television technology. And they're showing a very small, small camera. The photograph is in black and white and a very small, looks like a five inch screen. And I can't tell what the video project is, whether it's, it's definitely television though because they're talking about CCD sensors and that's written obviously in English there. But I brought that for you so that you could get someone who knows German to translate the story for you.

>> Ok.

>> There you go.

>> I'll do that. Thank you Gary. I appreciate.

>> I got you a souvenir from Germany.

>> Well of course the connection here is I got my start in the newspaper business, so you're recognizing that.

>> There you go. I thought you'd have fun with that.

>> You bet.

>> And now it's time for our news. In science and technology this week and well, first of all, a virus recently linked to prostate cancer is a new suspect in chronic fatigue syndrome. A scientist tested blood from 101 patients and found two thirds carry it. Now that doesn't mean the virus causes chronic fatigue according to the research published in a recent edition of Journal Science. However, a team of scientists from the National Cancer Institute and Nevada's Whitmore Peterson Institute say it was possible the virus named XMRV which is foreign to us was just a passenger virus that catches a ride in patients whose immune systems are weakened by chronic fatigue. Moreover the research has found that nearly 4% of healthy people also carry the virus. Scientists say they've spotted a huge new ring around Saturn, the largest planetary ring seen yet in the solar system. The faint ring made by, made of tiny particles partly marks the orbit of Saturn's distant moon Phoebe. And the scientists at the University of Virginia and colleagues reported in Journal Nature that Phoebe orbits the ringed planet at a radius of about eight million miles and evident, and evidently objects colliding with Phoebe and kicking up dust keep the ring supplied with material.

>> Wow.

>> That's pretty cool.

>> Yeah.

>> And they say this is one super sized ring. British scientists are developing ways to use nano particles as tiny magnets that can heat up and kill cancer cells without harming health cells around them. This is fascinating stuff. The researchers have found that iron oxide nano particles can be attached to cancer seeking antibodies or injected into cancer seeking stem cells which take them straight to the tumors they need to kill. Heating the cells to just five or six degrees Celsius above body temperature in a new device called a magnetic alternating current hyperthermia or as they call it MACH machine can kill the cancer cells. The researchers say the MACH device is a like a microwave, heating only targeted cells. And they say this offers a new way to treat cancer. And if they can get the magnetic particles to migrate to cancer cells, they can kill only the cancer cells, leaving the healthy tissues unharmed and the ultimate targeted therapy. Scientists say this is working on an early stage and no tests have yet been done on humans. And that they're hoping to start clinical trials in about three years.

>> Wow.

>> Wouldn't that be something?

>> That's fascinating.

>> I'm telling you, the medical field is coming right along. You've got quite a list of innovations in history.

>> Thank you Gary, I do. You know it was on October 10th, 1913 the waters of the Atlantic and the Pacific Oceans mixed directly for the first time in the New Panama Canal after engineers blew up the last remaining dam. It was October 11th, back in 1863 that Thomas Edison tried to patent what would have been the world's first computer, an election tabulating machine. Boy, Florida could've used that about eight years ago.

>> No kidding.

>> Congress rejected the invention because counting the votes too fast would prevent filibustering. Geologist Katherine Sullivan became the first American woman to walk in space on October 11th, that was, that was 25 years ago. And also on October 11th, that marked the 48th anniversary that NASA's first lunar probe, Pioneer 1, failed to escape Earth's gravity, fell back into the atmosphere and was burned up. It was on the same date in 1968 that Apollo 7 blasted off. It was the manned flight in the US moon program. A new record for circling the globe by airplane was set 15 years ago on October 13th when an Air France supersonic jet completed a circular navigation in 33 hours. October 14 marked the 59th anniversary of when US Air Force Captain Charles, old Chuck Yeager, broke the sound barrier in a rocket powered Bell X-S-1 test plane. Even though he had three cracked ribs from a horse riding accident the day before. He couldn't even really move his left arm. Ironically on October 15th, 1997 a jet powered car driven by RAF pilot Andy Green became the first automobile to break the sound barrier and Gary, that's our innovations in history.

>> Cool. Coming up, Health Access for All, it's called Docvia. We'll talk about it when we return on *Oklahoma Innovations*.

[Music]

>> The waving wheat can sure smell sweet when the wind comes right behind the rain. But what happens when the rain doesn't come? Wheat growers across Oklahoma know too well the impact that a poor growing season can have on crops and markets. Drought, disease and poor soil are just a few of the things that keep farmers up at night. But what if those issues were a thing of the past? In labs funded by the Oklahoma Center for the Advancement of Science and Technology, researchers are finding new ways for producing better plants that can withstand unfavorable conditions, creating opportunities and improving the economy. That's what OCAST is all about. OCAST is looking for small business owners serious about investigating new products, services and processes. For more information, call OCAST toll free at 8662652215 or visit their website at OCAST.ok.gov. In a state deeply rooted in agriculture, plant science helps Oklahoma farmers grow their business.

>> You're listening to Oklahoma Science Radio Magazine, *Oklahoma Innovations* on the OCAST radio network.

[Music]

>> Imagine yourself in a major medical emergency situation, whether it's in an ER, perhaps its in Oklahoma, it might be an [inaudible] situation. You're unconscious, you have no one there to speak on your behalf or even if you do, they may not know what medications you're taking, what kind of, what your background is in health. Wouldn't it be cool now for that medical provider to just turn on the computer, fire up your, have access to your medical history so they'll know what drugs you may be allergic to, what kind of, whatever your medical history is.

>> That's exactly right.

>> It would help them better treat you.

>> It's called Invisible Bracelet. And we're going have Noah Roberts explain that to us, but before we do that, let's ask Noah just how he came to be in this business. And he's the chief executive of Tulsa based Docvia. And been involved with the organization about four years.

>> Correct.

>> And we need to know about you Noah. Tell us a little bit about how you came to be here.

>> Ok, well, I have been in Oklahoma about a little more than half my life, I just turned 40. I'm originally from Boise, Idaho. And four years ago, two practicing physicians at St. John's, Mike Maxwell and Jon Cox, approached us and I was running a design firm at the time. And they said we've got this really cool idea. It's online banking for health care. And actually the first time we met I said it's interesting but I think you should be doctors. Doctors probably shouldn't build software. They came back with a prototype and it was extremely impressive and we knew they weren't going to quit. So we, we committed. They had been in business for about a year and a half, two years.

>> Yeah.

>> But yeah, I've been involved for four years as CEO.

>> We featured them in our OCAST impact report about four, maybe five years ago. I've lost track of time.

>> That's right.

>> And they, they were very impressive. They were operating out of St. John's Hospital over in, over in Tulsa area. I assume they still are, I don't know.

>> They still are.

>> Ok. Before you got involved with Docvia, before you met these two gentlemen, tell us a little bit about your life and tell us about, a little bit about Boise, Idaho.

>> Yeah.

>> Boise, we know if you're local or not. You know it's Boise. Oklahomans say Boise.

>> I know it. It's Boise, is that what you said?

>> Yes.

>> And like Boise City, Oklahoma is Boise.

>> That's right. That's right. Well it's funny. I grew up in a place where there's some of the most beautiful skiing in the country and I've never skied in my life. I moved to Oklahoma, everybody skis.

>> Yeah, I was going to say, you've missed out on some great, outright fun, but go ahead.

>> Yeah. I, my background I have an English degree and a minor in theology from Oklahoma Christian University.

>> Ok.

>> And I like to tell people I'm a dyslexic English major. I was diagnosed the last semester of my senior year in college. Would have been nice to know that maybe 18 years earlier.

>> Well, it would've been.

>> But, like many entrepreneurs I've met over the years, there's a combination of dyslexia and ADHD and I certainly fall in that category, so, but yeah. I got my first computer 30 years ago, it was an Apple II. And my first real job out of college was working for Apple. And here I am all these years later.

>> Let me guess, you're an Apple person, a Mac person, an iPhone person.

>> All of the above.

>> There you go, once a Mac, always a Mac person.

>> That's right, that's right. So yeah.

>> So now, here you are on *Oklahoma Innovations* talking about a new technology and I just want to point this out very quickly. You can explain this a little further if you would. As of this very minute, based on your projections, there's two million Oklahomans who are eligible for the coverage we're getting ready to talk about.

>> That's right.

>> And as of December, we'll have another half million, 2.5 million who will be eligible. Which to me means rapid growth.

>> Yes.

>> Let's talk about what's growing so fast. Tell us about Docvia and tell us about the Invisible Bracelet.

>> So when I got involved with the company, we, we started out with a pretty ambitious mission, health access for all. And that's one of those things that's pretty easy to say and hard to do. Whether you're dealing with trying to create health access in Oklahoma or places like South Africa or Bangladesh, it's a real challenge. But we figured out that you know online banking has been out for 10 years, why can't we have HIPAA compliant, secure, encrypted messaging with either a mobile device or the Internet? And so we were fortunate to get our first customer, the St. John's Health System. They've been using our software for four years now. There's about 5000 patients that use our software every day to do routine things like nurse questions, schedule an appointment, lab results, even online consults. But over two years ago about halfway through the process, one of our employees parents had a stroke, called their medic and watching them try, the medic try to extract the information out of that family member.

>> Oh, I'm sure.

>> Pushed us over the top and.

>> Oh yeah.

>> We, we went to Steve Williamson who's the founder and CEO of EMSA and we told him what our idea was and basically why can't patients preregister with their local ambulance service. And most people in Oklahoma don't realize, EMSA has an international reputation based on their response to the Oklahoma City bombing.

>> Right.

>> And when you contrast that to what we saw on 911, where Port Authority had difficult time connecting with fire and the EMS and police. Oklahoma City had a phenomenal response, an international response and so.

>> That became part of what we know, what was referred then and I think still now is the Oklahoma Standard.

>> Absolutely. And so Steven Williamson is the incoming president for the American Ambulance Association which is like the Blue Chip Organization in the world. And, and really it's, it's not just convenience, they are about a mile from us. But it is the fact that we thought if we can get EMSA behind this idea, we can get every medic, all the great groups around the world on. And that's really what, what we've done. They vetted the concept. They've been a great development partner and that's why we're launching this here in Oklahoma.

>> That's something I'd like to do real quick, we only have about a minute. You mentioned the term HIPAA. Explain to the listeners who may not know what that means.

>> The, what we're really talking about is the federal standard for patient privacy and security.

>> Ok.

>> And I, I say all the time that we, early on we spent much more on HIPAA attorneys than we did on engineers. To be in this business, patient privacy and security.

>> Yeah.

>> It's everything. And so we've, we've made a significant investment in that. And that's what's allowed us to be as successful as we are.

>> Yeah, because that would be my question is concern from a patient's standpoint is how secure the software environment is. And so I think that's a, that would be a big issue for people to.

>> Certainly.

>> Yeah, absolutely. We're visiting with a gentleman who has a company called Docvia. Now if you don't know what Docvia is, you will later. Noah Roberts is our guest. He's the CEO. This is a Tulsa based company. And their signature statement is health access for all and as the program moves forward, you'll find out more about how you can take advantage of this wonderful technology when we return on *Oklahoma Innovations*.

[Music]

>> Now in its 14th year, this is *Oklahoma Innovations* on the OCAST radio network.

>> The stress of finding a job after college is compounded for recent graduates entering a tough job market. But thanks to the Oklahoma Center for the Advancement of Science and Technology, more students connect with the state's most advanced technology companies while earning income and valuable on the job training. Through the OCAST R and D intern partnerships program, students gain experience in the industry, work with mentors and operate specialized instruments. Intern training leads to starting salaries 12% higher than Oklahoma's average per capita income. OCAST is investing in Oklahoma's best and brightest, creating jobs, investing in our future. That's what OCAST is all about. OCAST is seeking intern partnership opportunities that will allow Oklahoma students to gain hands on experience in science and technology careers. For more information, call OCAST toll free at 8662652215 or visit their website at OCAST.ok.gov. The future of Oklahoma looks bright.

>> Imagine not being able to see your daughter on her wedding day or experiencing your grandchild's first smile. An estimated one and three quarter Americans over age 50 have developed a loss of vision or blindness due to age related macular degeneration. And of the more than 200000 Oklahomans living with diabetes, 90% will develop eye disease. With the support of the Oklahoma Center for the Advancement of Science and Technology, an Oklahoma company is developing innovative treatments for blinding eye disease. The research will improve the lives of people across the nation, create new treatments that are more comfortable for patients and prevent vision loss. OCAST is looking for Oklahoma researchers serious about investigating new treatments and products that improve the quality of life and the economy for Oklahomans. For more information call OCAST toll free at 8662652215 or visit their website at OCAST.ok.gov. Investing in science and technology, it's good for your health.

>> Research and development, technology transfer and commercialization, creating high paying jobs in Oklahoma, it's what OCAST is all about. This is *Oklahoma Innovations* on the OCAST radio network.

[Music]

>> Steve and I are delighted you've joined us this week on *Oklahoma Innovations* and we appreciate you passing the word on to other friends and relatives about this program because you never know what kind of things are going to come out of the water when it comes to science and

technology in Oklahoma. We have a guest this week who has brought us some really fascinating information. His name is Noah Roberts. He's president and CEO of a company called Docvia based in Tulsa. Now Docvia is, is basically a company that has established information. It's access between established patients and health providers. And this is primarily beneficial in emergency situations. But it's also applicable if for example you enter a hospital for surgery or whatever and perhaps you don't have your health records available and you've got this little ID thing, it's kind of, they call it an Invisible Bracelet. Basically it's a card, isn't it?

>> That's right, it's a virtual medical ID.

>> Tell us about how that works now. We sign up for this and is there a cost?

>> There is. We created a web service, so a person can go online in about five minutes.

>> And that's InvisibleBracelet.org.

>> InvisibleBracelet.org. And we're not asking for your entire health history. We're asking for those vital fields that a medic is going to try to extract from you in an emergency situation. Your allergies, current medication list, do you have one of these five major health conditions which are the five that, that most states are dealing with. COPD, asthma, heart disease, diabetes, these things.

>> Ok.

>> Do you have insurance? Who's your provider? And who are your in case of emergency contacts or what's now being called ICE, ICE contacts.

>> These are five basic questions that are really quick that actually have to be answered.

>> That's correct. They're required fields, so once you complete that, we charge a customer five dollars. It's five dollars per year.

>> Cheap.

>> Per person. Ok?

>> Cheap.

>> Our idea was that could we make it so inexpensive where everybody could afford it.

>> Absolutely.

>> And get lots and lots of people on. And so once you've registered, we mail you a membership card. And this card is about the size of a credit card, has two detachable fobs that can go on a key chain, for kids it goes on a backpack. It also has four stickers that you can put on the back of your driver's license.

>> Oh wow.

>> I should say almost all medics are trained, first thing they look for is a driver's license, maybe a health care. Really the first thing that we do is when you flip the license over, there's an eight digit alpha numeric pin.

>> Yep.

>> That pin is randomly generated out of about 20 billion options. Once you claim that, you get your card, you sign back in and you claim that pin, that pin is forever tied to those vital emergency fields that you just put in there.

>> Wow.

>> So, our medics which are they have to be registered with the Health Department and in good standing. We give them that search engine for free. We train them, we certify them, the Health Department creates continuing education units, whatever. But they either have a device in the field that they can do that search on that eight digit string or they can go through their 911 dispatch and get that information over a secure radio. So they know in seconds really what, what your issues are, whether you can speak or not, if you're confused, incapacitated, whatever.

>> I am just totally amazed at this. This sounds like the answer to a, to many years of worry about what do I do with this patient when a, when a paramedic or some healthcare deliverer encounters someone who can't speak or who is, who is.

>> That's right.

>> Unconscious for whatever reason and how do I help this person. Well this is going to give you some answers.

>> For years they've tried things that I think are valuable like Vial of Life, which is either like a pill bottle or a Ziploc baggy that you put in your fridge and you write all your stuff. There's just a ton of people that don't want to have that accessible. The other deal is there's been lots of devices and things, but when you look at the cost and the privacy and security of walking around with something physically in your pocket that, that takes seconds away from the medic.

>> Right.

>> The thing about the sticker on the license is it doesn't change the behavior of the medic. They can quickly get that. Get the patient loaded and if they do transport, they're only obligation is to confirm where they're being transported to. So when you look at that search engine, it'll say you know St. John's, confirm. Are you transporting the patient to St. John's? Yes. When you click that, we send out up to 10 text message or emails instantaneously in about 10 seconds to all of those ICE contacts that you predesignated. So it's a little bit like Facebook where you know you have say hey, Noah Roberts has asked you to be his emergency contact, to accept go here, to decline go here. You know who's accepted that request so that if you are transported, you get a HIPAA compliant or you know patient privacy security standard message. It says Noah Roberts has been transported to St. John's by EMSA at 10:35 pm.

>> Let's take a scenario here. We got a family situation. Grandma and grandpa are on a trip to let's say Tulsa, OK. Have a car accident or grandpa has a heart attack and he's transported to St. John's, message goes to a family designated, someone that close, that would be the next of kin to be, to be contacted as well as probably the health provider, the doctor, whatever in that case.

>> That's correct.

>> So they all get an instantaneous email about that, right?

>> So many of our customers have told us, yes they've got a daughter, a mother, they've got a health provider. But it could also be a coworker. It could be a neighbor, it could be a minister.

That's why we set it up to ten. But it's fascinating when you think about the number of baby boomers for instance that are dealing with parents in long term care facilities and kids in college.

>> Yeah.

>> Do you want to know if your daughter was in a car accident you know driving to Norman?

>> Sure.

>> Yes you do. Or if your mom who's in an assisted living center is being transported. So we, we have felt like this solution is long overdue. As an entrepreneur, when you go out and start investing in patents and stuff like that, you think surely, surely somebody has done something like this. And we were, we were blown away that so many high tech companies in healthcare are obsessing over everything except for what really happens in that emergency situation.

>> Yeah.

>> Emergency medical records and you know all these other systems. But nothing, nothing quite like Invisible Bracelet.

>> So the, this enhances the speed for which healthcare can be provided.

>> Certainly.

>> And so, so what you're saying is for 15 dollars a year, my wife, my daughter and myself, like all three of us can, can be covered by this program.

>> That is correct.

>> Outstanding. That is, I mean I, I'm not here to sell it but I am here to point out that I mean, what a bargain. For 15 dollars a year, you can get this kind of, because I've always wondered, what do paramedics do when they encounter a patient, they don't know what, what their history is. I mean especially if they're unconscious.

>> The reality is these medics want to hold your hand, they want to help you. They do not want to go through your medicine cabinet and your purse and things.

>> They don't have time.

>> They don't have time.

>> They probably wouldn't administer penicillin, but I would hope they wouldn't do that to me because I'm horribly allergic to it.

>> The, that's really the whole point.

>> Yeah.

>> Is when you can provide complete, accurate relevant and timely information to the medic, it improves the quality of care, it improves the coordination of care and ultimately we think patient satisfaction goes through the roof because you're not sweating those details.

>> Now let's be clear. In the, in the, when you talk about saving lives, this is not going to, if you're in a horrific accident where you're critically or fatally injured, that's not going to save your life. But for people who are injured and are still living and still have the capacity to have their lives sustained, for people who have medical emergencies, this gives the healthcare deliverer a, not a guarantee, but a better chance at dealing with it and having a positive outcome.

>> That's correct. I can tell you our goal has been to cover all 606 miles of Oklahoma Turnpike so that a state trooper, again first responders, one of the first things they do is try to find ID. They can't do anything with that eight digit pin, but they can certainly relay it.

>> Sure.

>> To the ambulance service. The idea that the medic should know what that information is before they arrive is a big deal.

>> When they, by the time they get there, they've got a plan of action based upon the information that's been provided through Docvia.

>> That's correct.

>> Now let's talk the networking side with the healthcare providers. I mean because this, I mean you're talking about a broad base here. So what is your, how are you marketing to those providers?

>> We have taken a pretty different approach. When you talk about healthcare technology, it's always super expensive.

>> Oh yeah.

>> Complicated and proprietary. And when you think about all the fuss over healthcare right now and trying to get access to care for everyone, we said you know how can you make it safe, simple and inexpensive? So we've built everything on open source, standard space software so that we can make it extremely easy for a health system or EMS provider to get access to our software. So our, our dream is whether it's here in Oklahoma or around the world, patients should have the ability to set up one neutral place to access all their providers, whether that be your internist or family practitioner, your local ambulance provider. And you determine, I'm going to give this much information to EMSA, I want to give more information to my internist. I get referred to a specialist, you know do I want to also give them access to my surgical history and that other stuff. You control that. That, that's.

>> That's good.

>> Very important. We, we are staying away from things that block out people from being able to have access to their information and their providers.

>> My, I think what I'm interested in is figuring out if I'm in another state, or as like I was in Germany, you know last week and had gotten ill, had this information, those medical providers knowing to go to this site, this website, get access to my medical history. We're going to talk more about that when we come back. We're talking with Noah Roberts, president and CEO of Docvia, health access for all based in Tulsa, when we return on *Oklahoma Innovations*.

[Music]

>> This is Oklahoma Science Radio Magazine, *Oklahoma Innovations* with Gary Own and Steve Paris on the OCAST radio network.

>> As you drive across Oklahoma, you can see thousands of gas wells sprinkled throughout the countryside. Many of these wells don't produce enough natural gas to justify pipelines, but without this access, thousands of well sites are abandoned. With the support of the Oklahoma Center for the Advancement of Science and Technology, one company is creating a portable

device, transported on a flatbed truck to process natural gas at well sites. This technology optimizes the amount of gas that can be captured and releases no byproducts into the atmosphere. This idea provides new opportunities for small oil and gas producers while bringing us one step closer to energy independence. Supporting innovation, that's what OCAST is all about. OCAST is looking for small business owners serious about investigating new products, services and processes. For more information call OCAST toll free at 8662652215 or visit their website at OCAST.ok.gov. Investing in research and development, it pumps new life in Oklahoma's economy.

[Music]

>> This program is about science, technology, innovation, commercialization, education, funding when it relates to science and technology, finding out on this program this week about software innovation. The company is Docvia, health access for all. A company based out of Tulsa and in the near future you're going to be hearing more about InvisibleBracelet.org. Can they go to that website now?

>> They can.

>> Ok, and for five bucks a year, you can sign up per family member and have information accessible to health providers. Now one of the things Noah that we haven't clear up yet that I want our listeners to understand is that even though you've been on this platform for a few years, one of the things I think is confusing is who right now has access from a health provider glass, who has access to this information?

>> Our service area is in Oklahoma only.

>> Right now.

>> For Invisible Bracelet, that service area includes about one point three million people. It's the Oklahoma City, Tulsa and Grove, Oklahoma surrounding area. On November 1st, here in just a few weeks, we will have over two and a half million people in that coverage area because we have 14 more EMS providers that are registered with the state's health department, they've been certified and trained. We have 40 more that have requested a license.

>> Ok.

>> And want training. So we've got a few partnerships in the works that we're going to announce this week that will put Invisible Bracelet in all 77 counties. And so we're, we are thrilled that you can go register today. But I try to tell folks, if you live in the pan handle, but you drive through Tulsa or Oklahoma City, you need to register. Your local EMS provider will not be you know in Oklahoma City to take care of you. It's going to be EMSA. So it makes a ton of sense that if you live, work or travel through the heart of Oklahoma, it makes a ton of sense to register.

>> Yeah and let me, let me put that in perspective. The numbers, you said two and a half million by December. There's three and a half million people in Oklahoma, so you'll have almost all the state covered except for a million people.

>> That is correct. And so we designed this as a national registry, but it doesn't do any good to go out and talk about a national registry if you cannot get all these different EMS groups on and make it easy for people to get on. So that's really what led us to the state of Oklahoma.

>> Let's build this picture now. You're, you all are in the marketing phase and you're experiencing rapid growth right here in Oklahoma.

>> Correct.

>> But you have plans for the rest of the world, do you not?

>> We do.

>> Let's talk about that.

>> We felt like the best way to build a national registry or something that could be used through multiple nations that have EMS infrastructure is cover every last mile of Oklahoma. Oklahoma is a microcosm of the United States. Whether you look at it politically, economically, educationally, you name it. And there are significant challenges but yet we have found when we launched this thing in April, the speed in which local EMS providers said we want on, this is a good idea, that, that network, that grid if you will that began to light up gave us the indication that this thing really could go very quickly. And again back to HIPAA and patient privacy and security, our advisors were saying there isn't a county in the United States that you could not offer this service. So our goal was let's go get the biggest employer on, let's focus on long term care facilities, state colleges, school systems and obviously the largest employer is the state. So it's kind of hilarious that a start up or early stage venture partnering with the state government, but that's, that's really exactly what we did.

>> Yeah and that picked up a lot with their dependents, what about 78000 Oklahomans?

>> That's correct. So this month, there's a 37000 plus state employees that are enrolling for.

>> Signing up.

>> For all their health benefits. And combined they have 78000 people on their plans. So the information that we're getting from the state is extremely encouraging. That, that a significant number of state employees are saying I want this for myself and or multiple family members.

>> You've made it affordable, you've made it easy and you get a tremendous benefit. I mean this could be life saving and will be for many people in Oklahoma, will be a life saving tool that can be used. I mean be interesting to be able to go five years out and look back and say how many lives were saved because of this program? And I, I think that would, if we could capture that number, I think we would all be shocked.

>> We, we've been pretty intentional about staying in Oklahoma. We, we bought a building, it was the first building that was leveled in the race riot in Greenwood. This is five years ago, boarded up buildings, there's a 30, 40 million dollar baseball park being built right next to our building.

>> Good, good thinking.

>> Well, you know we, friends and family thought we were off our rocker, but we've, we've been very intentional about staying in Oklahoma and people talk about you know can you get Google to come to Oklahoma? Our strategy has been build a Google.

>> There you go.

>> Let's, let's create something ourselves and Oklahoma if it has anything is, is creativity and ingenuity and so we've, we've felt like this is a great place to tell a story. And if we're going to

build a world standard, let's get it in all 77 counties and make it accessible to, to everybody here in our state.

>> Yeah, you mentioned Grove, Oklahoma which is kind of the retirement center for the state. There are more retirees in that community I think than any or in that surrounding area than any other place in the state. Why did you pick Grove?

>> It's pretty interesting. Dr. Doug Cox who's a state representative.

>> Right.

>> He's an EMS director for Integris Grove.

>> He's also a pilot.

>> I didn't know that.

>> Yeah, he flies all over the state.

>> And I was at the capitol one day and he said, this is a great idea. And I said thank you very much. And he said I want to get my medics on. I said that, I appreciate it. And he said, like today. So I literally drove, I've probably personally driven about 25, 30000 miles since January.

>> Wow.

>> County to county and Grove, Grove was the first rural community that said, we want on, we want every medic trained, let's go.

>> That's great.

>> You know we've got some basic questions that you've provided for us. I think for people who sign up. For instance, if you sign up, you don't think you like it the second year, which I can't imagine why you wouldn't, but you have an opt out of your automatic renewal?

>> That's right.

>> Once you sign up, you're automatically renewed and then you get a notice at the end of the year that says it's time to renew, we're going to do it automatically. Then you have an opt out period.

>> That's right. So you are really required to do two things. All your required fields have to be updated. You can get a text message or email reminder every three months, six months or nine months, people like my mom, her meds change. For everyone else at a minimum, you know doctors and medics have said at a minimum one year.

>> Yeah.

>> Yeah.

>> Is better than not knowing anything.

>> That's right.

>> So let's make sure it's updated every year.

>> So it's pretty easy to change if your medical situation or your meds change.

>> Yeah, absolutely.

>> Update that.

>> Absolutely. If I can, just a quick anecdote. When I was working with the team and going to EMSA to bring this, really the final stage of quality testing. We took it to EMSA and we're trying to break it, or they're trying to break it. And I said you know my information is pretty boring, so I'm going to, you know with permission, I've got my mom's information. So today I'm going to be Judy Roberts. You know by the time I put in 12, 13 medications for all, for the different conditions that she's having to deal with, it took about 10 minutes. So we get through that. I found out at 9 pm that night that my mom was getting transported by EMSA while I was doing the demo.

>> Wow.

>> Oh my goodness.

>> So everything that could have gone wrong, went wrong in that she forgot to tell them she was allergic to surgical tape.

>> Oh my.

>> Allergic to codeine, my dad wasn't present, she couldn't remember my sister's number, my brother's number or my number. I wasn't notified until about nine hours later. So I remember the next call to EMSA was let's get, let's get this thing going and needless to say my mom was patient number 1. But yeah, for people that have multiple conditions or, or several you know meds or whatever, you're still looking at about ten minutes. Where we want to make the biggest impact is registration assistance. We know there are communities without Internet access or there's customers without debit card, credit card. So we've been approached by some great institutions that have said we, we think we can help. We're going to create a convenient place for people to come register if they can't get it done themselves. And that's.

>> Cool.

>> It's very encouraging.

>> Well you know in that situation what you just said is the immediacy, because when you have a medical emergency, the first thing that happens for some reason we, our memory bank shuts down because we're kind of in panic mode. So we can't think about all that stuff. So that's why it's a great service.

>> That's right.

>> Yeah. You've touched on this but I want to, I want to reiterate it. If you live in rural Oklahoma, and you're not in one of the main areas, ideally when can you expect to have, because your goal is to cover the entire state.

>> That's correct.

>> That's one of your goals and beyond that, you know you're going to go even further. But if you live in rural Oklahoma or an area that's not served, how do you?

>> It's pretty exciting. So November 1st and I can't, I'm not going to be able to list every single one of them, but when you look at Creek County, Muskogee County, Comanche County, LeFlore County.

>> Large population counties.

>> Big, but also they cover a huge area. I mean there's, we have providers that cover 800 square miles. So to be able to get them on in November means that this isn't just an urban or a retirement community.

>> Right.

>> Deal. This is every where. And so by December we really, we really have the potential to be in all 77 counties. But the goal is, our goal was can we get to two and a half million people in the service area.

>> I want to allow time here real quick for two websites, your Docvia website, that's spelled d o c v i a, so www.docvia.com and the other website, InvisibleBracelet.org. Check it out, find out about the emergency health registry and keep up to date on this. We got to have you back, give updates on all this.

>> That'd be fun.

>> Exactly.

>> I'm going to be here.

>> Yeah I bet a year from now we'll know a lot of new things.

>> Noah Roberts, thank you so much. And thank you to, to you I should say for listening to our program. Steve and I will talk to you next week on *Oklahoma Innovations*. Have a good week.

[Music]

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