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FEATURED ARTICLE

An Interview about Telemedicine with John Oxendine, Georgia Insurance and Fire Commissioner, and Paula Guy, R.N., Chief Executive Officer of the Georgia Partnership for Telehealth

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On March 12, 2009, four representatives of *Journal of Diabetes Science and Technology* interviewed John Oxendine, one of the United States government's leading officials in the field of telemedicine legislation and regulation. Mr. Oxendine has been the Georgia Insurance and Fire Commissioner since 1994. In 2005, Mr. Oxendine spearheaded the Rural Georgia Healthcare Initiative. This initiative launched one of the largest and most comprehensive telemedicine networks in the United States, which is the Georgia Partnership for Telehealth. This program consists of 77 telemedicine and teleradiology sites across Georgia and provides residents of rural regions of Georgia with local access to specialty care that is usually found only in large urban areas. Paula Guy, R.N, who serves as the chief executive officer of the Georgia Partnership for Telehealth and who has 9 years of leadership experience in building telemedicine networks in the state of Georgia, also participated in the interview.

A native Georgian, John Oxendine was first elected to statewide office in Georgia in 1994. He has been reelected subsequently in three consecutive races and is now in his fourth term of office. In his capacity as his state's insurance and fire commissioner, Mr. Oxendine has levied more fines on health maintenance organizations for late payments to physicians and hospitals than any other insurance commissioner in the United States. Mr. Oxendine is currently seeking the Republican nomination to run for governor of Georgia in 2010.

The transcript of the interview follows.

Dr. Klonoff:

What do you see as the benefits of telemedicine and telehealth?

Mr. Oxendine

There are various differences, one is specifically in the state of Georgia, and Georgia is like a lot of states, it has a very large geography, the largest state east of the Mississippi. It's a state in which we have one huge mega city; we have many second- and third-tier cities, as well as many rural areas in which there are not huge populations to support many of the specialists that are needed. What we find in rural areas are a couple of issues. One of course is an economic development problem where companies, factories, and other businesses don't want to invest in a community if they don't have confidence in the health care delivery system. Everybody thinks of roads, education, and tax incentives and things like that for economic development, but we have found that a quality health care delivery system in a community is also an important factor in economic development.

We also find that when you have a condition beyond that of your local primary care doctor and you're referred to a specialist that may be 3 or 4 hours away by car is that some people, especially those who earn an hourly wage, can't afford to take a day or even 2 days off of work if it is really far to travel without pay so they have a tendency to put it off or don't go to the specialist until their condition gets even worse; at that time it's much more expensive to treat. We also find that people have a

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tendency to not make the follow-up visit, again because of the transportation issue.

What telemedicine does is to allow someone to take a couple of hours off work, go down to the telemedicine center, be examined or have a follow-up visit by that specialist, in the big city, and stay in their local community and be treated by their primary care doctor under the guidance of a specialist. From an economic development standpoint, the company that the person works for still feels good about it because they know their employees aren't going to be taking the whole day off work and travel halfway across the state.

We have also added teleradiology to our network. We have found that many small communities cannot afford to have radiologists there all the time, especially after hours. In some instances when a radiologist was not available and people were showing up at the emergency room, needing X-rays, CAT scans, MRIs, ultrasounds, and whatever, they would have to take the image and sometimes have a janitor get in a car and drive one or two counties over to try to find a radiologist to read it and do a report. And of course in our teleradiology network, you know it's digitized, instantly goes to one place, and then the report comes back on the computer screen and it's there. So if you ask me why telemedicine is important, simply put I think it equalizes the quality of health care throughout the state of Georgia and has that potential throughout the country and even internationally so that everybody, regardless of where they live, can have a similar quality of health care, which I think is something that is appropriate to deliver.

Dr. Klonoff:

How have the patients and the health care professionals felt about this telehealth program?

Mr. Oxendine:

The patients that I have spoken to at first are a little leery. They are like "what's this thing" and they need a little coaxing to do it at first. Once they do it, they love it and they feel like they're getting a great quality of health care. They are glad they did not have to get in a car and drive hours and hours one way just to see a doctor, and they instantly say that they would do it again and tell their friends about it.

I've talked to the doctors, and I say "Doctor, do you feel like you are giving as good a quality treatment through telehealth as you would in an examining room, and they say yes. They tell me they wouldn't do it if they didn't feel comfortable with it. The medical malpractice carriers in the state have agreed that there is no substantial increased risk of malpractice. They do not distinguish and charge extra for telemedicine in Georgia. The board of medical examiners had an old rule that basically said you can't treat someone you haven't seen, which was obviously very logical at one time. With this technology, they agreed that physically meeting a person face to face and touching that person were not necessary, and of course the board of medical examiners also changed their rules. We went to the insurance companies, where most of the big companies agreed to it just voluntarily, but we went ahead and passed a law that applied to everyone. Insurance companies in Georgia are not allowed to discriminate on how health care is delivered. If they would pay Dr. Jones to see you in person, then they have to pay for Dr. Jones to see you electronically. The key is that Dr. Jones is in the network you are authorized to be treated by; therefore, the way in which that health care is delivered, whether it's in person or through telemedicine, is irrelevant. Paula, would you agree with that statement?

Ms. Guy:

I would just add that we have done patient satisfaction surveys, which are voluntary, but most of the patients do it, and we have a 95% satisfaction rate.

Mr. Oxendine:

Paula is the first director of the Georgia Partnership for Telehealth program. I would like to give you a history of how it started. It started in my office and we thought it was something we needed to do to equalize the quality of health care. We went first to the Well Point Foundation and got a private grant from the foundation. Later we got some grants from the USDA. I actually first met Paula over a telemedicine machine, and we were looking for someone to run the program. I felt very good about her and actually suggested that they need to go to south Georgia and find her. Most recently we have done something that is very unusual for government. The program was started as part of my office under the jurisdiction and control of my office, the state insurance department. About 14 months ago we spun it off and created a private foundation, a charitable not-for-profit. Actually, I transferred the equipment and put money and really the control into this private foundation. I used my position as a government official to start and give birth to it, but then we transferred everything to an independent foundation that would continue to carry it on year

after year, which I think is actually a good thing if the government could start something and maybe allow a not-for-profit or charity or faith-based organization run it. Paula is now an employee of the separate foundation. She is the director that runs the day-to-day management and reports to the board of trustees.

Dr. Klonoff:

Mr. Oxendine, it turns out the U.S. military is very interested in telemedicine because military people are all over the world and there is not always a specialist nearby when one is needed. Colonel Poropatich has a lot of experience in telemedicine, and Major True has a lot of interest and experience in telemedicine. I'm going to ask if they would ask you some questions about how you see you're tying in with the military.

Dr. Poropatich:

This is Colonel Poropatich, I'm a pulmonary clinical care physician stationed at Fort Detrick. I do my clinical work at Walter Reid. It's a pleasure to meet Mr. Oxendine and Paula on the phone. I appreciate the opportunity to ask questions. I have two, if I may.

The military has a single credentialing and privileging process, if you will, whereby state licenses are not issues in federal government. When you were describing some of the rural areas in Georgia, my question involves how you cover cross state license or issues where remote parts of the state are bordering other states where the health care resources are more prevalent, let's say in a border state, but you have to ensure that the licensures are covered. I don't know whether that's a big issue for you, and if it is, is it something whereby you can establish memorandums of agreement or work through the state licensure issues in a more streamlined fashion to avoid delays in getting providers in other states seeing residents of Georgia on the border?

Mr. Oxendine:

What we do sometimes in border areas is we will have health care providers that are licensed in both states that sometimes pay, sometimes not. Basically the key is that it is something we are going to have to work on long term. Let's say we had a Georgia doctor and a patient at Maxwell Air Force Base. Maxwell is Montgomery Alabama. Unless you were to claim the Air Force is a separate enclave and not part of the state of Alabama, obviously there would be problems that the airman is in Alabama, and only an Alabama-licensed doctor were treating him, which would be problematic. If you have airmen in Germany, could the German authorities come to Georgia and hunt a doctor down? It would be much easier for the Georgia doctor to treat somebody overseas, outside the United States. I think the bigger problem becomes when it's inside the United States. If you're in a third-world country, it's probably lot less of a problem. That is an issue that does have to be addressed.

Now one thing that I actually had a discussion about the other day with a member of the Georgia Board of Examiners, a licensed medical doctor, and he confirmed, and Paula I haven't even told you this, that if we have a Georgia doctor and a scenario where he has a vacation home in South Carolina and is spending a lot of time at the beach in South Carolina, but still has patients in Georgia, he could be in South Carolina, use telemedicine to treat patients that are back in Georgia, and be in total compliance with his Georgia license, with him not needing to have a South Carolina license. The view would be that the patient is in Georgia and the treatment is being rendered to the patient who is physically in Georgia, even though the doctor happens to be in South Carolina and does not have a South Carolina license. So it seems to be more tied to where the patient is from what we've seen.

Ms. Guy:

I just want to say that it is an issue; I guess you know the American Telemedicine Association is constantly looking at how we can fix this, because it is an issue, like if we would like to connect with Johns Hopkins or whatever; any physician that provides consultation has to be licensed in the state of Georgia. Even the teleradiologist, if he or she is in another state, still has to have a Georgia license to use at the moment. We're working with a composite board to work something out that would be a very simple process for someone who's licensed in another state to become eligible to do telemedicine in the state, but we have not been able to get that issue resolved yet.

Dr. Poropatich:

I agree. The cross state license issue has been a chronic issue in the field of telemedicine for the last 10 or 15 years. I see the state of Georgia being in a leadership role to work with other states that are equally strong in telemedicine to try to work through that cross state licensing issue.

Ms. Guy

Yes, we're definitely willing to put forth any effort that we could do to help in that area.

Dr. Klonoff:

Dr. True, do you have a question?

Dr. True:

My name is Major Mark True. I'm an endocrinologist stationed at Wilford Hall Medical Center, San Antonio Texas. Wilford Hall is the largest Air Force medical center.

My question is essentially this: Telemedicine provides access of the specialist to rural areas. However, because the specialist's time is still limited to fixed time periods, how can a specialist devote time to telemedicine versus the local immediate needs with which he or she is already overbooked?

Ms. Guy:

I will say that endocrinology is a huge need and that we need every clinic that we can get. We have endocrinologists that provide clinics; basically what they do is give us blocks of times where they are willing to do telemedicine clinics. I think we have clinics about twice a month. The endocrinologist sees about 10 to 12 patients at those times. We are actively seeking other endocrinologists because, like you say, the availability and the time that they have are limited. We have a scheduling system that works wonderfully and is well based, and each of our specialists gives us block times so that we know when they are able to see patients. Folks call into a number, and if they ask to see a neurologist or endocrinologist then we go to that Web site to determine what's available. They are offered an opportunity to see which one they would like to choose from if we have several available. It works really nicely.

Mr. Oxendine:

That's one thing that we did day one, and we were putting this together before Paula got involved, we went and surveyed other states, mainly the western states because they had the largest network; California was the largest. Georgia is now by far the largest of any single state. I think the VA is the largest. We looked at the western states to see what worked and what did not. One thing that we saw was if you called a doctor and said hey we would like you to walk across the street to the clinic and treat somebody with telemedicine and just do one person, they often were resistant. So when we got to creating the scheduling system, obviously this is nonemergency care, we go to Dr. Smith and say hey we got four people that need to see you, let's schedule it a week from Wednesday at 2:00 or 2:30 whatever so the doctor just simply goes across the street, sees all the different people, knocks it out, and goes back to his office. You know it's real simple, like a hospital visit. He's not doing it just for one person, he's doing it for a list of people, which we found to be very important in how we got the doctors to really buy into it. Now one thing that we still want to do, and this applies to the military a great deal, is to use this technology in emergency situations, where we see this developing, and it's what we intend to do for a long-term plan. Georgia, for example, has a serious problem of a totally inadequate trauma network, if you even want to call it a trauma network. Realistically, we could never raise the money to build a bricks-and-mortar trauma network that we need, especially with our substantial geography. We would need all the federal bailout money to it; it's just not enough money.

So, one thing that we are looking at using the telemedicine network and where it's now scheduled visits and nonemergency situations is moving it to the emergency room. The Medical College of Georgia has a very limited program, in a limited geographical area, to an area that is only being used for stroke. They have the telemedicine in the emergency rooms at that golden hour to really treat victims. A specialist from the Medical College of Georgia hospital will be guiding the local ER hospital. We see long term expanding that into all types of trauma care to have local ER doctors stabilize the patient until they can be transported more leisurely into an appropriate larger hospital. Obviously that would have a very good military application around the globe.

Ms. Guy:

One of the successes too would you would have to make it convenient for the specialist. We have many specialists with regular clinics who have their own systems and they can just do it from their office. It's easier to get them to participate if you can make it as convenient as possible.

Dr. Klonoff:

When a patient goes to a rural clinic and is going to be communicating with the specialist is the communication through audio with a microphone or is it through video with a live camera?

Ms. Guy:

We have the peripherals, such as patient cameras, that can look in the ear, nose, and throat and electronic stethoscopes for the chest sound; we have software where we can transmit images such as digital pictures

for dermatology problems or X-rays or demographics for insurance information. All of that can be sent out—it's basically an electronic medical record, as not many people have electronic medical records yet so it's not integrated.

Mr. Oxendine:

Tell them about the gloves that we're going to be moving to in the near future.

Ms. Guy:

There is a glove now that was especially designed for elderly people because we are starting at the nursing homes and doing our first nursing home follow-ups. It's a glove that they can put on that's basically a 12 lead AKG and they can lay it across the patient's chest; they put on a node up under the chest and the rest is on the glove, and it does an immediate 12 lead AKG. It's amazing what is out there.

Dr. Klonoff:

We have a hospital specialist on the phone, Jeff Joseph, and I'm going to ask Jeff if he would like to ask any questions.

Dr. Joseph:

I am an anesthesiologist as well as I direct a research lab that makes medical devices. I've worked in the past with a computer system where underneath it is a drawer that has a blood pressure cup, pulse oximiter, which is similar to an EKG, and all of those vital sign monitors. My question to you is there any discussion of putting this in the patient's house, where the patient would actually call in once or several times a week, not so much to the specialist, but to a nurse practitioner who could detect a change in the patient's condition before he or she gets seriously ill? So my question is: are you moving this all the way to the patient's house or is it mostly in central monitoring stations?

Mr. Oxendine

There have been a lot of discussions about that specifically and a lot of companies feel that this would very helpful in that arena, as well of course of monitoring medication, devices that would monitor the taking of medication, and if they take the proper pill at the proper time.

Ms. Guy:

We are very interested in moving into that arena; we are working with a couple of home health agencies that want to do some telemedicine, and there is some home health kind of things now. However, funding has been an issue, but we are definitely interested in going down that path. We feel like care definitely starts in the home. We are hoping that we can help in that area in the very near future.

Dr. Joseph:

What kind of information do you need to collect to show the funding agencies that this is cost-effective? Is it keeping people out of the hospital or is it a time improvement, what is it that you think you need to document to get people to continue to fund this?

Ms. Guy:

I think you said two things, basically it's very cost-effective; if you can keep patients under control with their medication and monitor them immediately if there starts to be a problem then you can fix it a lot quicker than you can if it gets too bad, before you have to take them to the hospital. So this is preventive care, and there is no question that this saves money. So I think that is the big thing, definitely everyone wants to hear that it's saving money.

Dr. Joseph:

I assume that you are going after the key patient groups, such as heart failure, asthma, diabetes, and those few chronic diseases that never seem to go away but need a lot of attention.

Ms. Guy:

That is correct.

Dr. Klonoff:

Do you have any special programs that are in place now for diabetes?

Ms. Guy:

We have a clinic for diabetes education, and one of our rural facilities diabetes educators provides these clinics regularly.

Dr. Klonoff:

I would like to ask a question to you Mr. Oxendine: What has been the response to electronic medical records in Georgia? My own hospital, Mills-Peninsula Health Service in San Mateo, California, is about to become a totally paperless hospital starting April 1. Many hospitals in California are going that direction. What is the status in Georgia?

Mr. Oxendine:

We are definitely moving toward electronic medical records. The insurance companies are also pushing it but they want the bills, all the records to be submitted, and all of the documentation kept up; the hospitals are pushing it as well. The hospitals are 100% on board; the medical practices are very much on board. I think the resistance that we are seeing is from the small town medical practices. The small town doctors are the ones that we're having problems with.

Ms. Guy:

I agree with that. Most of the hospitals are hoping that the stimulus money will help them get the electronic medical recording in place. The holdup of course is funding.

Dr. Joseph:

Is there any specific funding in the stimulus for telemedicine?

Ms. Guy:

Yes there is, I can send you the slide presentation, but there are a lot of opportunities that we can look into. There is nothing announced as of yet, but they are saying that perhaps by next week or the week after that we should start seeing opportunities for us to apply, and you could fit telemedicine into several areas, five or six areas, that we could look into.

Dr. Klonoff:

Mr. Oxendine, how did you first get interested in telemedicine? There are so few public officials that even know what this is and here you're taking a major leadership role.

Mr. Oxendine:

I've been in office as the insurance commissioner of Georgia for 14 years. For many years I've heard the people in the Georgia legislature talk about how tomorrow we are going to do something about rural health care and try to improve the quality of rural health care. Being an insurance commissioner I interact with hospitals and doctors a lot. I've heard a lot about it, and nothing was happening. I just simply said let's see what we can do. Maybe there is something I could do, and I worked with WellPoint Foundation, which is sponsored by WellPoint, the largest health care insurance company in the country. I was able to convince them into giving me a grant, and we put something together. It was sort of like the need was there, everyone agreed the need was there, but no one was willing to do anything about it. Most government has a lot of geography.The uniqueness of my agency is that it's independently elected. I'm not bound, I don't work for the governor, and I'm not held by the bureaucracy of the state government. I remember when we started to do it. We went to the Georgia Technology Authority, which does work for the governor, as it was a logical fit. I asked them if they were interested. They said yes, and they wanted to do a study, which would take about a year just for a study committee. I sat still very patiently, and I politely told them thanks but no thanks, but I can be halfway through in a year. I'd rather do it my own way and not worry about government geography so we just jumped in and did it. The other agencies accused of us of not having a plan or not having studied it sufficiently. We looked and saw what others did well and we know what they did badly. We're going to do what they did well and try to avoid what they did badly, and we're going to do it. Being that I only report to the citizens I was able to take the ball and run with it.

Dr. Klonoff:

I would like to ask Dr. Poropatich and Dr. True if they see similar features in the U.S. Army and U.S. Air Force in the use of telemedicine programs and the Georgia program or are you doing things differently? What do you think about what you've heard so far?

Reply not on the tape.

Ms. Guy:

We still use T1 lines to get great quality video, but we can also access the Internet.

So you can do video over the Internet; it's not quite as good as our T1 lines, but because we have a virtual private network we can go anywhere in the world. Our specialist could see all over.

Mr. Oxendine:

I will tell you an interest that I personally have had for economic development is that this could develop into an export industry for the state of Georgia. Those individuals can serve world countries that do not have the means to pay. Obviously military personnel in countries have Uncle Sam, and I see a good potential industry of Georgia doctors exporting their medical expertise around the globe, which is something that I've always been interested in seeing develop.

Dr. Klonoff:

That's an interesting idea. I really like how you've put together the infrastructure, working with the malpractice, the insurance payors, and boards of medical quality. You had to put this all together to make it work in order to make the program work. That's difficult to do.

Mr. Oxendine:

It helped that I am the insurance commissioner so the insurance companies cooperate with me. In all honesty it's not that I'm that smart, I'm really not, there are other states that had worked on this, especially a lot of states that have many Indian reservations, have done things like California, which has massive geography, but their systems were older, they were the pioneers, they had older systems, and because they were the pioneers they had no one to copy and made a lot of mistakes. What we really focused on was looking at their network and taking what was good, which was the sort of advantage we had being the new kid on the block. We also had the advantage of having a big bank account to start something from scratch that a lot of people did not. We were able to put it together rapidly, as we had millions and millions of upfront funding, which was an advantage as well. You could say I'm just a good copycat.

Ms. Guy:

You know I've been doing telemedicine for 10 years and there is no way we could have done this if we didn't have somebody like Commissioner Oxendine at the state level.

Dr. Joseph:

Is there anyone in the federal government with an interest like yours that would want to expand this nationwide?

Dr. Poropatich:

I know that the VA is doing some stuff, but Paula, do you have a better feel for this?

Ms. Guy:

Well I think that telemedicine is definitely at the forefront even at the federal level right now. There really is a lot of discussion about it. The VA is the only one at the federal level. The military, of course, has been doing telemedicine for some time. I don't know exactly how extensive telemedicine programs are. Just psychiatry for elders would be unbelievable because you know psychiatry is one of the number one clinics and one of the more successful clinics. So I can see that we need it in all kinds of ways. I'm not sure exactly what the military is doing already, but I know that they are doing a lot.

Dr. Klonoff:

Two of us on this phone call, Dr. True and I, will be speaking in Warsaw in June at a telemedicine meeting, and at that program in Warsaw they have a telefoot program to monitor foot wounds. They can measure the size of the wound and look at it with special dedicated cameras. Are you going to go into that direction?

Ms. Guy:

We do have nursing homes in the network; we have Archibald Medical Center, which has five affiliate hospitals and they also have nursing homes. They are doing a huge number of our consultations. I would say a third of them.

Dr. Klonoff:

I would like Dr. Poropatich and Dr. True to comment on how you see the Georgia program compared with either the U.S. Army telemedicine program or the U.S. Air Force telemedicine program.

Dr. True:

My sense is that the military is studying telemedicine extensively and is making it more routine, especially supporting our operations overseas. Colonel Poropatich is better able to comment on the extent of operational military telemedicine programs. I'm very interested in learning more about the details of the program in Georgia. One of the areas I would be interested in exploring is just how does a specialist interact with that primary care doctor at the rural site and how does that interaction come through? I think the core problem is that we can develop the technology to get that resource of the specialist to interact with the patients at remote locations, but we still have a limited number of specialists. How do we use this great technology most effectively to multiply what the specialist can do?

Mr. Oxendine:

I think the key to what we have found is that a primary care physician can treat, outside of surgery of course, almost any condition. It's just that the primary care physician needs a block of managing the time, setting the appointment, and having that specialist give that guidance to the primary care doctor. What we see is that the primary care doctor is treating most of these medical

conditions. Obviously, something like psychiatry really relies a lot more on the specialist side. So for many of the conditions the specialist monitors and emails directions and orders tests to that primary care doctor on what to do and how to treat that patient.

Ms. Guy:

We found that Medicare does not pay for going forward. Going forward is going to be the future, and we are doing a good bit of going forward now with Medicaid, and our commercial payors are paying it.

Basically we take a digital image and store it and then the doctor looks at it at his convenience. You necessarily have to see the patient, but just need an opinion or the primary care physician may say this looks funny let's have a specialist look at it. Basically, send the history, the lab tests, the vital signs, and these kinds of things and he may or may not need to see the patient live.

Dr. Poropatich:

In the Army we have pretty extensive telemedicine programs both in the United States and in forward settings. I just got back from Afghanistan a couple of weeks ago, and I've been to Iraq a couple of times. We're doing a lot of store and forward based on operational needs where band width is more strained. In the U.S. Army we have a very extensive teledermatology program. Connected to the Army, Navy, and Air Force we have cardiac echo and traumatic brain injury in all of our six regions sites; we also include Hawaii, Europe, and the United States. We have a multidisciplinary traumatic brain injury approach that looks at neurology, neurosurgery, psychiatry, mental health, and a variety of medical disciplines. A very extensive program that we have involves using cell phones. Half the world's population has a cell phone. Our international interests go beyond just providing for U.S. forces overseas. For example, the maternal fetal care program in Afghanistan I'm working on provides messages to download to educate them about nutritional issues and then, when the baby is born, for example, vaccination issues. We have really been very, very active in telemedicine. The only area I see us not as active is in the field of home care, and I think that over time that will become more prevalent for the military, but we dabbled in home care off and on but for us it's primarily a clinical cosmetical center kind of focus, very heavy in store and forward. And again I go back in telemedicine to 1992 and I had the pleasure of working with the Medical College of Georgia and the Georgia TeleMed Program back then, and there was an extensive telemed program over 10 years ago, which sounds like this is kind of a rebirth of that same kind of concept. I don't know what happened between the original program and this new program.

Mr. Oxendine:

That program in the early 1990s was begun by former United States Senator Zell Miller. He was pretty well known. During his first term as governor in the early 1990s he created a telemedicine program. What happened was that technology was not as developed back then, and simply there were some initial problems with funding and initial grants, and no one really said how they were going to fund this long-term program once the initial money ran out and it ran out. They also made a lot of mistakes and we studied what they did. They didn't plan how to work with the doctors; they didn't work out the reimbursement from the insurance companies. They would call a doctor and say drop what you are doing and please go see this patient. The doctors did not want to. It wasn't convenient for doctors and there wasn't any reimbursement. It was a very good stab at it but they were learning. We had the advantage of being more recent and doing it differently. Now we have about 83 sites. Plus we have 16 teleradiology sites, and I think we're about to go to 19 teleradiology sites.

Dr. Joseph:

Are these sites located in physicians' offices? Are they located in companies? Where are they located physically?

Mr. Oxendine:

Most of them are hospitals and clinics. I think we have some in doctors' offices.

Ms. Guy:

They are also in mental health wards and nursing homes, we have two county jail pilot projects, and we're beginning to work with trauma sites. In July we hope to have our first trauma site.

Dr. Joseph:

Is there any discussion of having a clinic in a large company?

Ms. Guy:

There is actually; we have had some discussions with several large corporations about how we could help them in providing health care to their employees.

Mr. Oxendine:

The network we set up is open access so it's not just one way—the rural area going to a big city hospital. Anybody in the network can talk to anybody so you could actually have a small town that happens to have a specialist and you want some other small town doctor that happens to be a specialist or whatever to treat a patient, you can do that. Anybody in the network can do it. We actually had cases where specialists from up north have retired to small towns in Georgia. They want to do a little bit of health care on the side, but they are semiretired, and they become specialists doing a lot of work with us while living in a little small town, but they happen to be a specialist from New York.

Dr. Klonoff:

Mr. Oxendine, at this point what do you think are the biggest barriers to expanding telehealth for people in Georgia and for the United States?

Mr. Oxendine:

Money is always an issue.

Ms. Guy:

The number one issue is reimbursement, for Georgia it is no longer a real issue, but for other states it's a huge issue. And then I think the time has come now that people will be open to telemedicine. I think more people are open to it now, but it's still a different way of doing business, and it has taken us, we started this 4 and half years ago, really up until last year to really hit our stride. We've done a lot of marketing and a lot of educating; probably every primary care physician in the state of Georgia has been talked to about telemedicine so those are the kind of things that we have the advantage of having. In addition to the money that other states have not had, we had a staff that we could put out to do these kinds of things. Also, I think that just the idea of doing things electronically, thinking that patients don't want to be seen that way, they'd rather be seen with hands on is a barrier. You have to get past that. In addition, I think we've had some of the most negative physicians become our champions after they participated so I think those are our real issues.

Dr. Poropatich:

I think some of the patients that have grasped telemedicine the best have been the children. Pediatrics is a real problem in Georgia. In the few cases I've looked at, I think children and teenagers have loved being examined by telemedicine.

Ms. Guy:

They all do really; we've had very few negative comments.

Dr. Klonoff:

I have one last question for you. Where do you think we'll be 5 to 10 years from now on telemedicine in Georgia and nationally?

Mr. Oxendine:

Let's put it this way, our kids in school do their homework, they fill it out on the computer, they push send and it goes straight to their teacher's computer, and they don't have to carry their homework to school anymore and turn it in.

Naturally they still have to show their work. They're doing homework and submitting it on their computer. I can tell you that says it right there. More and more of health care and everything else is going to be done electronically. People are buying more and more insurance on the computer. I think our network is going to continue to grow and will be in emergency rooms and trauma situations and is going to be held in small rural hospitals under the guidance of a trauma specialist. Who knows, maybe someday there may be a space station on Mars doing it.

Dr. Poropatich:

Based on the fact that Mr. Oxendine has the power from his elected office to really affect change, I just see such great value in furthering the state of telemedicine in Georgia. I was wondering if you see that opportunity in other states with other insurance commissioners? Have you reached out to them and said look what we've been able to do? It would wonderful to see other states enlightened by your great success.

Mr. Oxendine:

We haven't but it is something that I would be willing to do. A lot of it is going to take a funding mechanism to do it. To be blunt, we were in a situation where WellPoint and Anthem were merging and the synergy came together where things they were wanting to do in Georgia according with their merger became appropriate for them to make a charitable investment into the quality of health care. That was a unique situation and we got our initial seed money, along with other monies. However, we did have that unique moment in history, of that merger, and where in other states they made public

charity investments, but it was not until telemedicine that I told them that was what I wanted them to do.

Dr. Poropatich:

You didn't have another state that was encouraging you, and you'll be there to encourage the next state, which will make a difference.

Mr. Oxendine:

Yes, I did not have anyone encouraging me, but I will be happy to sit there and encourage anybody else. This week I'll be meeting with insurance officials from around the country in San Diego, and I will routinely be meeting with insurance supervisors from around the globe on an international basis. Then I can happily do anything to assist.