(Music)

Mark Masselli: This is Conversations on Health Care. I am Mark Masselli.

Margaret Flinter: And I am Margaret Flinter.

Mark Masselli: Well Margaret, there was quite a firestorm last week over the Susan G. Komen Foundation decision to pull funding for Planned Parenthood. That announcement from the world's largest organization dedicated to breast cancer research really created a backlash across our society.

Margaret Flinter: It was amazing actually to see this become absolutely front and center on the national stage and show just how much people care about these issues. Social media played a large role I think in this national response but it was all about the Susan G. Komen leadership announcing that they would change their policies and withdraw financial support to any organization that was under Congressional investigation. Unfortunately, they didn't apply that policy uniformly. The Komen leadership insisted that the move was not politically motivated to appease their conservative supporters. But in the face of that remarkable public outcry they reversed their decision, apologized for the controversy, and I understand one of their lead strategists of that policy has just stepped out.

Mark Masselli: Let's hope these two organizations who do just such great work for women's health will now be able to continue their work in partnership and that we can all move forward.

Margaret Flinter: Moving beyond the national scene to the global health front, there was a joint announcement last week that may have a significant impact on suffering around the world, a collaboration has been formed between the World Health Organization, the Bill and Melinda Gates Foundation, a number of countries, groups like the Lions Club and some of the big pharma companies all with a single goal to eradicate 10 what they call neglected tropical diseases that afflict millions in the Third World and have a profound impact on people's ability to survive and thrive in their home communities.

Mark Masselli: These conditions are very treatable with the right medications but because these diseases like leprosy are not health concerns outside the Third World there is very little political incentive for drug companies to tackle these 10 conditions.

Margaret Flinter: And Mark, we have been seeing for a while now that some of these major investments by foundations, and certainly Bill and Melinda Gates is one of them, may be able to do what NGOs and government have not been able to do. They are pulling $800 million including a large commitment to the drugs

that are necessary to actually wipe out, not just reduce but wipe out targeted illnesses the way we have approached smallpox in the world to allow people to live productive healthy lives. And it seems it does take this kind of collaboration beyond the NGOs and government to tackle these really big global health issues.

Mark Masselli: Well I am glad they are doing it. And one trend that is changing the face of global health as well as health here in America is telemedicine, medicine being delivered and engaged electronically, via digital technology like smartphones or iPads and the Internet. Our guest today is the Cofounder and CEO of the American Telemedicine Association.

Margaret Flinter: Jonathan Linkous has been analyzed in the world of telemedicine since way back in the early 1990s, way ahead of the technology explosion that has allowed so many of those early expectations to go from kind of far fetched ideas to really pretty commonplace in health care today.

Mark Masselli: He will talk about some of the exciting new advances in mobile health and telemedicine that have the potential to revolutionize how quality care is delivered and how patients will become more empowered in their own health outcomes through the use of this technology.

Margaret Flinter: Mr. Linkous will be discussing everything from the proliferation of thousands of medical apps to the remote robotic medicine of the future. But no matter what the story, you can find all of our shows and hear more about us by Googling www.chcradio.com.

Mark Masselli: And as always, if you have feedback, e-mail us at www.chcradio.com we would love to hear from you. Coming up our conversations with Jonathan Linkous but first, here is our producer Marianne O'Hare with this week's Headline News.

(Music)

Marianne O'Hare: I am Marianne O'Hare with today's Headline News. The fallout continues from Susan G. Komen Foundation Planned Parenthood Debacle last week in which the world's largest breast cancer research organization announced it was withdrawing its financial support to long time partner and (04:00 inaudible) Planned Parenthood later reversing the decision after a huge public outcry. Now the person thought to be responsible for the withdrawal of support VP of Policy of Komen, Karen Handel resigned yesterday. Since joining Komen in 2011, she has been strongly supportive of cutting off funds to Planned Parenthood because of its abortion policies. Handel continues to deny that the funding move was political in nature. Komen Foundation leadership saying this week, they are learning from their mistakes.

The growth of telemedicine has some roadblocks to expansion chief among them being the inability of doctors licensed to practice in one state being able to treat a patient across state lines. New Mexico Senator Tom Udall is crafting a bill that would address that issue. The bill would streamline licensure portability to make it easier for doctors to practice in more than one state. The bill would create a unified set of licensure data that would allow physicians to sign up for a national license. Opponents of the measure including the Federation of State Medical Boards worry it will undermine oversight and a state's right to censor bad practices. The bill is expected to be presented in April.

The FDA is revising its recommendations on administering vaccinations for the HPV virus or Human Papillomavirus which has been recommended for preadolescent girls since 2006. The virus is largely responsible for cervical cancer. But recent studies also show a link between the virus and head and neck cancers as well. They are now recommending the vaccine for all preadolescent boys and catch-up vaccines for 30 to 21 year old males moving forward. I am Marianne O'Hare with this Headline News.

(Music)

Mark Masselli: Today, Margaret and I are speaking with Jonathan Linkous, Chief Executive Officer of the American Telemedicine Association, the largest global non-profit organization dedicated to fully integrating telemedicine into transformed health care systems to improve quality and affordability of health care throughout the world. Mr. Linkous, welcome to Conversations on Health Care.

Jonathan Linkous: Glad to be here, thank you.

Mark Masselli: Jon, you are a veteran in the field of telemedicine policy development and you launched the American Telemedicine Association back in 1993 way ahead of the technology curve. Now with the explosion of technology applications I imagine you are seeing applications in place that you could have only imagined 20 years ago. Tell us about telemedicine in the 21st century and how is it different from what you envisioned years ago?

Jonathan Linkous: It is certainly different, we always said, I said in 1993 that the implementation of telemedicine around the country is just around the corner and it was a much bigger corner than I thought. But it is not only more widespread but it is very different than we had anticipated back in '93.

Telemedicine was largely a big video conferencing box and people thought of it as something that a large hospital could use to see a patient in a rural area occasionally and the used this high fangled high cost technology called video conferencing and now it's everything from handheld mobile devices to data

streams to imaging and everything in between. It's becoming so ubiquitous it's a great part of life these days.

Margaret Flinter: Jon, you recently wrote about the seven biggest trends in telemedicine that we are likely to see in 2012 and I would like to ask you if you could maybe focus on two of them, you could pick any two. But the two I would ask you to focus on, one that addressed cost, the shift away from fee-for-service reimbursement as a trend and the second, telemedicine actually becoming the standard of care in some clinical areas. Tell us about these trends and how soon do you think they go from trend to accepted normal practice.

Jonathan Linkous: Well, the traditional way we all get paid of course is fee-for-service. Now in terms of physicians or other health providers, they submit a bill to the insurance company, have a little code on it called a CPT code or couple different types of codes and they get paid according to that service. And the problem with that system and the fee-for-service system is the more times you see the doctor the more he is going to get paid. There is lot of incentive for doctors to see the patients more and more often and do a lot of other types of activities that all generate revenue. This subtle shift away from fee-for-service to managed care or capitated care or other types of medical homes, different ways of calling it but a different way of paying for it, you are paying for the health of the person rather than for the service delivered each time. It's a radical change probably more of a change in our health care system than anything else that's going on because it changes the perspective. You are no longer eager to see a patient come in to provide a service to them, to bill for it, you are eager to have your patient get well. They are on their own in some ways to figure out the best way to provide care for that patient, to make sure the patient is well and gets better as they are supposed to do. And that means for telemedicine we are shifting away from having to fight these battles with the folks in terms of is this an allowable cost, is this an appropriate technology, it's now to the providers who really should be making the decision.

Mark Masselli: Let me pull the thread a little on that. You see telemedicine providing an opportunity for tremendous new growth on the business side of health care and one of those areas will be the rise of the independent remote clinical enterprises. It's already being done successfully in certain disciplines like teleradiology and patient scans and x-rays are being analyzed by clinicians in other locations. What are some of the other promising growth areas that will not only provide better patient service through telemedicine but offer new business models for health care industry as well?

Jonathan Linkous: Couple of examples, stroke care. There are so many emergency medical rooms are in existence around the country that don't have a trained neurologist on staff but when you come in, someone comes in with a stroke it's really important to identify what type of stroke it is and identify what is the appropriate action to take whether it's administering a drug or other types of

medications. You need a neurologist make those assessments and if you don't have one on staff, you are up to the guess of someone who is maybe a very competent physician but not one who is trained in neurology. The work of telemedicine and tele-stroke care or tele-neurology allows all emergency rooms to have access to a shared neurologist who can see the patient at the time they come in. This has been around for about five or 10 years. There are hundreds of stories of people whose lives have been changed. Lives have been saved because they have had a very simple activity in emergency room where they can hook them up to a neurologist.

The same type of thing is being done with intensive care units. The hospitals around the country now, their ICUs are being looked at by an intensivist, someone who is trained in the study of taking care of patients who are in the ICU. Studies by several major groups including Leapfrog which is a national group of employer healthcare providers, and others, have said that if you use intensivist, the outcomes for patients in the intensive care unit dramatically change, their chances of survival and their chances of a good outcome are dramatically better. But not every hospital can afford an intensivist or not everyone can afford an intensivist 24X7. Not surprisingly, a lot of hospitals, even all the major hospitals in the country are now moving to share intensivist among a number of facilities. All of these sharing a specialist is not only cost efficient but it makes a real difference in patients' lives and that's what we are really talking about with telemedicine.

Margaret Flinter: Jon, when we interview folks like yourself that really have their finger on the pulse of these innovations I am often struck by what a gap there seems to be between sort of the general public's awareness of what's going on with these innovations and the tremendous progress that's being made in another area, the increasing emergence of robotics as part of medicine and as part of telemedicine. So where robotic surgery has become pretty commonplace in hospitals, we are also seeing some success using robotics in other areas as part of telemedicine and particularly in people's homes. Where do you see robotics fitting into telemedicine beyond the operating room and how deep is the research on their effectiveness and achieving the kinds of outcomes we would like to see?

Jonathan Linkous: I think in the next five years I think we will see a dramatic change in that area and people's lives will be changed as a result of that as well. When I first started in telemedicine this idea of robotic surgery was just being experimented with. And in the speeches I would give I would say, well sometime in our lifetime maybe we will have some of this actually deployed in some hospital. Well as you know, hundreds and hundreds of hospitals around the country are using robotic surgery all the time. Now there are robots where a physician can go grand rounds, can see patients in multiples places even though he is at home or she is at home or in some other location. They use a portable robot that moves down the hall and has their picture in the frame and they are

seeing a patient on the bedside and they turn to go to the next bedside. We are seeing robots that are used in ambulances to provide instant care to people on their way to the hospital. Surprising to me most of them out-of-the-box have been pretty cost effective. It's a type of technology that's still new, still being developed. Some of the robot companies that are working on things like cleaning your rug, there is a company that does that with a little robot, some of them are being used in health care field as well now. So we are seeing a lot of integration among different types of robotics and I think you are right, I think that's going to be moving into the home in a much bigger way in the next couple of years. We already have remote vital sign monitoring in the home that's becoming pretty standard in a lot of cases particularly people with chronic care. So I think it's only a matter of time that we are going to have other types of robotics that will move quickly into every place we are located.

Mark Masselli: Today, we are speaking with Jonathan LInkous, CEO of the American Telemedicine Association. Jonathan, the ATA is advising Congress, the administration and numerous organizations domestically and globally on policies that will promote the integration of telemedicine into health care systems. In fact, you predict the advances being made in telemedicine technologies are going to make health care a globally integrated business. What does globalization mean for a typical practice or a patient here at home?

Jonathan Linkous: I think the globalization is already here in many ways. For example, in radiology, almost every hospital now in United States now uses teleradiology. And increasingly the radiologist doesn't have to be located not only in the hospital, not necessarily in the same community, not even in this country. If you were in the hospital in Billings Montana in the middle of the night and you have a broken leg and you have x-ray being done and it's 03:00 in the morning and you don't have a radiologist there, a group of radiologists in Sydney, Australia will do the read.

Mark Masselli: I should note on that that they still need the state license, the state license is still trumping globalization.

Jonathan Linkous: Absolutely. Every physician that's involved in this providing care to patients in United States must be fully licensed and if they are in a hospital, credential and privileged in that hospital, that's beyond doubt. But United States is not only receiving care from physicians outside, we are providing care to other countries. Now this has been going on for a long time. In the Middle East, there are several companies that are providing not only radiology services but a variety of medical services. Typically, United States has been the source of providing medical services to people around the globe who have come here, traveled here to get medical services but now we are being able to export our expertise around the world and obviously other countries could provide here as well.

Margaret Flinter: Jon, you have I am sure seen literally thousands of tech gadgets and applications come and go in your years and I like the term the gold rush that you referred to of the 21st century with all the products that are being rushed into development and you also make the seasoned comment that a lot of them won't make it into the mainstream health care marketplace. But what will characterize the winners?

Jonathan Linkous: Well I think for many parts of telemedicine we are still at the top of the hype cycle and if you are familiar with that the next step is the trial of disillusionment. Now unfortunately, we are going to be there with some of these and there is going to be some products that seem wonderful but will fall off the landscape. Largely, the innovators in telemedicine include a variety of technology firms and experts and various types of telecommunications or technologies but you have got to be aware of the health care market. Health care payment systems as you well know are very different from buying something at a retail store. I think the products and the services that are aware of the way that health care is provided and can seamlessly integrate themselves into the delivery of care are the ones that are going to make it. The role of the government is in variety of areas from regulation of devices through the Food and Drug Administration to payment of services through Medicare. And just the general consensus of where we are going in terms of health care and medicine even the state medical boards and various activities that are functioning in terms of the Federal Trade Commission all of these are going to be playing a role in terms of shaping the health care delivery system of the future.

Mark Masselli: You know another area that's going to shape the growth of all this technology and there is a real explosion out there but it seems to be one of the Achilles' Heel might be around intellectual property and patterns for certain tech applications that could ostensibly make developers lot of money and there is nothing wrong with that but how do we balance the rights of the inventors with the underlying goals of promoting science and better health for the general population?

Jonathan Linkous: Well you have put your finger on something that's an emerging issue and concern in telemedicine. There has been a variety of folks out there who have decided they would get a patent on something as very fundamental as seeing a patient on a video conference, not different from a lot of emerging industries where you have this. And we are going through that period of figuring out the intellectual property and who owns it and what makes sense to move for the industry. But yes, we do have that concern right now because there are people who have got great inventions and they need to be protected. On the other hand, there is a lot of telemedicine that is growing and we need to have the innovation continue without being fettered with someone getting a patent that's a global patent and trying to enforce it by really just cherry picking off of the market that's out there now.

Margaret Flinter: Jon, I am a big fan of telemedicine as a great strategy to eliminate waste and waits and delays in connecting patients especially patients seen in primary care with specialists and other services. But I have to tell you those barriers are pretty formidable. Mark referenced the issue of a state like the one that we are based in that requires that the provider making a diagnosis radiologically hold a license to practice in the state but another one is just that the variation between the states and Medicaid in particular which makes up its mind on a state-to-state basis about the services it will cover is going to cover telemedicine. So you have got enormous challenge in front of I would think in terms of bringing some standardization and while each state is its own both laboratory for innovation and its own set of laws and regulations. What are you doing as an organization to try and get some consistency across the states so it can really make telemedicine efficient? So maybe you can just comment on what you are working on nationally.

Jonathan Linkous: Well you know diseases don't pay attention to state boundaries and actually the practice of medicine doesn't really pay attention to state boundaries. Every physician is granted an MD using the exact same test around the country. There has to be a lot more interaction among medical institutions, physicians and patients no matter where they are located. If you are in upstate New York why can't you see a specialist who happens to be in Atlanta if that's the best way of getting you care and also the more efficient way. Why would you have to hop on a plane to go down and see him if you can get the care there? So all of these things are a big challenge you are right. We are working with Congress to look at legislation. We are working with the states to try to look at various ways of providing reciprocity. Certainly there are differences in the way not only physicians and other health care providers are licensed but also how you view the practice of medicine. I think there is a lot of education that needs to done in terms of what is available now. I think a lot of the state regulators need to listen to their kids, what they are doing. There is just so much available now. And it's a big fight but I am very confident.

Mark Masselli: Speaking about listening to our kids certainly you would have to be thinking about mobile health and smartphones and talk to us a little bit about the difference between mHealth and telemedicine. Certainly telemedicine is one-to-one relationship between the patient and the doctor and mHealth seems to be one-to-many but how would you describe it in what are you doing as you move into that new arena?

Jonathan Linkous: Well mHealth is the latest craze in what I consider just really a component of telemedicine because the telemedicine is just providing health care remotely using telecommunications and if it's a handheld device or if it's a wired device to your desktop it doesn't really matter. Now mHealth is allowing types of services that we couldn't provide before but it's all part of a continuum of providing remote health care. So it's a great new way of allowing people to have access to health information, to have access to their physicians to send in vital

signs not just home based but work based, when you are on the subway based, anywhere you happen to be. But the real challenge for mHealth as for other technologies is to fit into the health care system. Now there is a lot of misperceptions among mHealth that it can be a consumer device that works almost outside of what you are doing when you see the doctor or going outside of the hospital and certainly it frees people, it empowers the consumer in many ways but you still have to somehow figure out how this fits into the overall system of getting health care. And so many applications that we see, I have been in telemedicine for 20-30 years are now just using handheld devices as another way of providing the care.

Margaret Flinter: Jon, we like to ask all of our guests this one final question. When you look around the country and the world what do you see in terms of innovation and who should our listeners at Conversations be keeping an eye on?

Jonathan Linkous: Certainly, the academic medical centers here are all experimenting with different approaches. But I think we are seeing in the Silicon Valley area and some of the technology companies that have led the way in the telecommunications world and consumer health are starting to get into this area as well and so I think we are going to see applications that come out of very, very different places, retail outlets, I think we are going to see entertainment industry get involved in the health care world. I think there is a lot of different ways that surprise me everyday in terms of where to turn for the next innovation.

Mark Masselli: Today, we have been speaking with Jonathan Linkous, CEO of the American Telemedicine Association. Thank you so much for joining us today.

Jonathan Linkous: Thank you.

Margaret Flinter: Each week Conversations highlights a bright idea about how to make wellness a part of our communities and everyday lives.

Mark Masselli: One of the directives of the Obama Administration's Health Care Reform Act requires pediatricians and health insurers to begin screening kids for obesity, a condition afflicting one in three American children, the problem what to do with those children who are identified as being overweight or obese. It's tough enough for adults to lose weight even with multiple programs at their disposal. There are relatively few programs available to overweight children and their families that aren't expensive or hospital based. UnitedHealthcare has teamed up with the YMCA to create a program for community-based weight loss sessions for kids and teens launching the pilot program in Providence, Rhode Island. The kids accompanied by a parent joined in a group session that are fun but also informative. Kids are educated about the calorie counts of food, learn about Body Mass Index and the importance of exercise on a daily basis. At the end of the 16 week program, the overweight kids lost an average of 3.5% of their body fat and the bonus, the parents and the rest of the family often lost weight too.

The pilot program is inexpensive, kid-directed and life changing. And with follow-up as part of the program, these kids know they will still be challenged to keep up with healthy lifestyle changes. Helping kids tackle obesity cheaply and in a community setting that works for kids and their families, now that's a bright idea.

Margaret Flinter: This is Conversations on Health Care. I am Margaret Flinter.

Mark Masselli: And I am Mark Masselli, peace and health.

Conversations on Health Care, broadcast from the campus of Wesleyan University at WESU, streaming live at www.wesufm.org and brought to you by the Community Health Center.