Mark Masselli: This is Conversations on Healthcare I'm Mark Masselli.

Margaret Flinter: And I'm Margaret Flinter.

Mark Masselli: Well Margaret our hearts go out to the folks impacted by the devastating tornados in Oklahoma.

Margaret Flinter: Dozens have been killed, hundreds injured, thousands of homes, businesses or hospitals destroyed schools just unbelievable devastation there Mark.

Mark Masselli: And the officials are worried there will be a growing number of walking wounded in that community, as reality sets in that many of these resentence have really lost everything.

Margaret Flinter: It seems there's been so many tragedies in the recent months and -- as always, you can't help but be moved by the spirit of resilience, and the way communities come together to help each other and just reminds us to how determine the human spirit is in the face of this ordeals really amazing to watch.

Mark Masselli: You know, I know on the front end of these tragedies the medical triage system works very well, but on the backend we've been talking a lot about the behavioral health responses that are needed for the long terms in this communities. And there's been a real focus amongst all these tragedies of redirecting ourselves about the importance of behavior health services in our community and in our thoughts and prayers are obviously with the folks in Oklahoma.

Margaret Flinter: You know, it's never all about one sector it's not all about prevention, not all about tertiary care, not all about mental health, it's about all that coming together. And I'd like to take a moment to know a milestone of a different sort and to say that Marilyn Tavenner has been confirmed just recently as the administrator of the centers for Medicare and Medicaid. The first time since 2004 that an individual has survived the political vetting process to be formally approved too and I think that's worth noting and congratulations to Ms. Tavenner.

Mark Masselli: She has a big job at the head of CMS which serves the healthcare needs of some hundred million plus Americans.

Margaret Flinter: And that's a bright spot in the somewhat contentious intersection between politics and healthcare policy these days.

Mark Masselli: That is for sure and beyond politics, it's good to keep our eyes on folks who are fostering innovation and healthcare. Our guest today is a co founder and CEO of the Institute for Health Technology Transformation, an organization that's seeks to foster accelerated adoption of health information technology, to improve healthcare delivery.

Margaret Flinter: Waco Hoover will be talking about his organizations recent report on how Big Data analytics in healthcare will be a game changer for helping health systems to improve outcomes, reduce errors, do a better job of tracking patient health and improving patient safety and of course all of that should also lead to reduce cost in healthcare.

Mark Masselli: FactCheck.org's Lori Robertson will be checking in with another corrected misstatement about health policy in the public arena.

Margaret Flinter: And no matter what the topic you can hear all of our shows by goggling CHCradio and as always, if you feel like comments please e-email us at CHCradio.com or find us on Facebook or Twitter because we love hearing from you.

Mark Masselli: We'll get to our interview in just a moment, but first here's our producer Marianne O'Hare, with this week's headline news.

(Music)

Marianne O'Hare: I'm Marianne O'Hare with this Healthcare Headlines. Electronic health records and disastrous, they seem to be able to ride out the storms together as officials tally up the damage and death toll from the Oklahoma tornados, one vulnerable are remain intact. After the disastrous hurricane and floods, when the Hurricane Katrina hit in New Orleans in 2005, the event was compounded, exponentially by the loss of thousands of medical records for residence in the floods. Electronic health records have come a long way since then, inspire ethic damage in the wake of the recent tornados in Moore Oklahoma. The electronic health records for some two million people in the region remain safely tucked away electronically in the remote data storage facility in Kansas City. Many of the essential elements of patient records for more than two million people have been backed up by the regional health information organization serving Oklahoma City, and stored it Cerner Corporation Data Warehouse, evacuating patients from the hospitals that were damaged in were was a problem. But wrangling its patient's record won't be. ADHD and obesity the two are linked apparently, study shows those young people with the tension deficit disorder were twice as likely to become obese as adults, a link apparently to the lack of impulse control. I'm Marianne O'Hare.

(Music)

Mark Masselli: We're speaking today with Waco Hoover cofounder and CEO of the Institute for Health Technology Transformation, one of the nation's leading organizations bringing public and private sector leaders together to foster the growth and effective use of technology across the Healthcare industry. Prior to founding the organization Mr. Hoover served in the United States Marine Corps, earned his MBA from the University of Florida and received his certification at the Harvard School of Public Health Program for leadership strategies for information technology in healthcare. Mr. Hoover welcome to conversations on healthcare.

Waco Hoover: Thank you, thank you for having me.

Mark Masselli: Like your institute just release a report analytics the nervous system of IT Enabled Healthcare, and that you explore the explosive growth and potential of health information technology as well as the need for more systemic approach to the collection and analysis of the massive amounts healthcare data. Can you help our listeners understand the different types of healthcare data you've been exploring and why this data analytics is so essential to improving the healthcare landscape?

Waco Hoover: So there are numbers of different types of data as -- when you think about the healthcare industry you got claims data, clinical data and then you also have it -- how the data store whether it's structured data or unstructured data. With respect to the claims data we're talking about from Heirs insurance companies. When then we're talking about the clinical data that's collective on the provider side, and historically -- and a lot of ideas has not been married up, however as the healthcare system continues to evolve and there is increasingly a lot of need to reduce cost but the same time **(5:53 Inaudible)** good quality. Organizations are able to **(5:57 Inaudible)** by combining this different types of data. As we move into an ear where most data is stored in on electronic health record as oppose to on paper, we're going to be able to again **(6:10 Inaudible)** medicine side on best practice. And then another aspects of it, is when we start talking about managing populations and I think, you know, last but not the least in to how that data is being used properly with healthcare reform, accountable care organizations. They're going to succeed, it's going to be imperative for organizations to have access to actionable data and data analytics the tools, strategies mechanism that organizations can effectively do that way.

Margaret Flinter: Well -- maybe you can talk a little bit about this new model of health data mining, where business and clinical intelligence overlapping. We have some examples from your work that might be really helpful for all listeners as well.

Waco Hoover: One examples looking at fraud data from the centers for Medicare and Medicaid, by using predictive analytic technology, they were able to save a 115 million dollars on a fees that were otherwise, you know, fund **(7:00 Inaudible)** on the nature. And that's pretty tremendous, just one key example right there when you start to look at how we can analyze this data. So when we start talking about how we are moving from volume i.e. you know, you get paid for transaction now we're in a place where we actually have the tools where we can actually do analysis when we're talking about the business intelligence we're looking at things like operational information cost. So there's going to be a tremendous amount of opportunity for how we're able to extract the sharing information, but as we start to, **(7:28 Inaudible)** we're going to see a tremendous amount of opportunity there.

Mark Masselli: Waco health data analytics is a pretty new discipline fueled by the rapid spread of electronic health records and that's really kick started by the federal government's commitment through the meaningful used dollars in 2010 to incent

providers and institutions to adopt electronic health records in -- I think a lot of -- there's a lot of uptake on that both by institutions and providers, and yet the healthcare industry is a little different than the banking industry which has a fairly sophisticated adaptation -- adoption of -- of banking information. But we lack behind on this -- in healthcare world. Can you give us a sense of the readiness of the majority of healthcare institutions and maybe the sort of solo providers to dive into this analytic areas I think you talked a little earlier about some of the obstacles that are inherent in getting this which is, you know, whether the data is structured, it's or -- it's unstructured data and some of the other ones, but give us the 50,000 foot look at how the -- the institutions are doing and how the private providers are doing.

Waco Hoover: So with respect to analytics, you know, we're very much in our infancy, now there are organization such as University of Pittsburg Medical Center **(8:54 Inaudible)** male clinic what we've all probably heard of. They -- have some very robust and **(8:59 Inaudible)** strategies, but they're definitely in the -- minority at this point. Electronic health records, that's really just the starting unless you get patient information into electronic format, that's when they're really fascinating and amazing things can start happen and where we can actually start to look at population base care, we can -- and how that impacts on the individual patient, you know, so after several years of the **(9:20 Inaudible)** the most recent data is the **(9:22 Inaudible)** national coordinator and the most recent report that they put out is that about 44% of US character hospital had a basic electronic health record systems. So in order to do anything I mean for really with the analytics you need to have that patient data in a **(9:36 Inaudible)** format. Or we'd made some tremendous drives, we still have a long way to go to where organization is really going to be in a position to leverage analytics in a really meaningful way. So of the **(9:48 Inaudible)** the soloed nature of data in healthcare, we talked about claims data, you know, business intelligence, you know, different organizations and so it's really, really challenging to get that data in a way that you can match it up and analyze it in a very sophisticated way. The other piece of it I think is that, you know, when you start thinking about analytics and data, so really understanding where to start and that's something that a lot of organizations are struggling with, you know, they're first getting their electronic health records system in place. So again understanding where to start, I'm not boiling the ocean if you will, is a really key challenge for organization that they consider when to get going and how they can tackle analytics.

Margaret Flinter: Well Wacko it's -- it's a very interesting kind of futurist perspective and as you are, you are answering Mark's question I was thinking about three people that we've had on the show in the recent to or not so recent past, Dr. Joe Selby from the Patient Centered Outcome Research Institute, Dr. Carolyn Clancy from AHRQ and Todd Parks, formally of a -- I think the office of the national coordinator in his famous "let's liberate the data" approach to things and all of them have in common a deep desire to take this data and make it meaningful to patients and it seems to me that if -- if you put your futurist glasses on it really fundamentally begins to change how we do research and who can do research and how we allow for research to be done then I -- why don't you've given some thoughts to the research implications of this sort of broad scale.

Mark Masselli: So -- absolutely and quite frankly I think that's one of the most fascinating areas when you start talking about electronic health record, we all I think very much think of those in a very transactional way you're, you know, lab data stored **(11:30 Inaudible)** and encounter with your clinician. But, you know, from my perspective where it really gets fascinating is as we start looking at things like genomics and you start looking at analyzing, you know, millions of individuals with a chronic condition across the country and then you can now also start to bench mark various characteristics or variable within their care, and then you can start looking at what genetic markers they have and then you sort of getting the thing like pharmacogenomics and how sophisticated we can get with that. Approximately 30% of cancer drugs, approximately 30% of patients don't respond to certain types of cancer drugs. Now that's pretty profound, you can think about the kind of cost for that and also if you understand that from the get go how much more effective that care can be or how much better it'd be the end of life could be for some data depending on, you know, their situation scenario. So on the research side of it, I think it's absolutely an amazing and as you said, you know, the -- the very -- the futurist perspective on I think it's going to really transform what -- where we've come over the past two decades and it's going to accelerate even quicker over **(12:37 Inaudible)** coming out in 15 and 20 years it's going to be quiet fascinating.

Mark Masselli: We're speaking today with Waco Hoover founder and CEO of the Institute for Health Technology Transformation committed to bringing public and private sector leaders together to foster the growth and effective use of technology across healthcare industries. Now I want to pull the thread a little on Margaret's question there and been thinking about consumer engagement strategies around healthcare information, because you have the sort of the -- traditional information about my health condition but really don't you also want to sort married up with information about my patterns of behavior I mean. So where is that merger of the purely health information with what the consumes thinking about in terms of their life styles approach, because if you're going to manage some of this chronic diseases it's not just by the numbers right? It's going to be sort of how we motivate people and I'm wondering sort of thinking about this big data that we're hearing it about, you're doing just on the healthcare side but, is there a marriage coming up between the two.

Waco Hoover: I think first and foremost, you know, we're starting to talk about not just being a patient, but actually being a consumer of healthcare. And traditionally we're rather passive in the nature in terms of how we, you know, approach our healthcare and how we engaged our clinicians, you know, it's very much something that, you know, they're in the business sickness, that we go and see our clinicians at first take. So a part of that transformation is, you know, consumers be more engaged, there's a number of amazing studies that actually talk about more activated patient specific good chronic condition, how the cost is significantly lower. Think about the airline industry for example, now it will be really, really challenging and **(14:25 Inaudible)** if we had to call someone or go in and see a travel agent to book airlines. So healthcare can borrow so many of these things, and there's groups like Kaiser Permanente ethic, there's a

number of different tools that are out there right now or that they **(14:38 Inaudible)** we can simply go on look at the availability to the clinician or specialist and make an appointment, I think that -- that's the earliest stages of that -- that convenient factor if you will, that -- that -- will slowly get us more activated in our care. And then the other piece of it, you're talking about, you know, being monitored outside of, you know, the hospital or it offers after all that's where we spent most of our lives. So I think tools for example is something it's simple as Fitbit which you're probably familiar with it's a wristband that you wear around and it tracks sleep patterns, or how many steps you take, some of the other things and then -- there's a app that feats into your smart phone or other device your computer. So I think those kinds of things are -- when we're just starting to seek how that's long it impact us, and I don't necessarily think at this point in time clinicians are ready to be a completely embrace that, because one of the biggest things that they're concern with is, you know, is the information trusted and, you know, what researches out there that demonstrates that if I compare the information from you Fitbit with, you know, the information that I'm looking at, you know, where there's five result cholesterol blood pressure etcetera, that there is actually going to be significant amount of change or behavior change as it relates to that. So, you know, as it relates in this area, it's fascinating because they hold so much potential and you've seen, you know, there's over 30,000 health apps on the market now, so as we --as we kind of go into this, there's going to be a tremendous amount of opportunity to -- to engage consumer slash patients and a way that -- that's currently not being done which I think is going to be really, really interesting to see how that unfolds.

Margaret Flinter: Well those are very fascinating kinds of data and uses of data and I'll third big group in there which I'll put in the cut and dried kind of data category and that's the data that comes from insurance claims and, you know, I -- I have to make a confession that it's only a few years ago that I realize there was something known as the All Claims Database and as I've come to learn about and see how some the stats that have adopted that use as a very powerful tool to look at healthcare cost and population health, and there are states you get a sense that by marrying the clinical data that now emerges from the electronic health records and some of the more consumer directed modalities that you described, with the claims picture might offer us a really new way and enhance way of looking at healthcare cost. And would -- if you talk a little bit about how we can marry claims data and clinical data to really get that 360 degree assessment and a much better handle on managing cost.

Waco Hoover: Sure of course, well I think, you know, for starters when you look at the most kind of successful health systems that are out there in a large **(17:20 Inaudible)** in great delivery networks, you know, groups like Kaiser Permanente **(17:24 Inaudible)** healthcare out of Salt Lake City in Utah and, you know, Geisinger in Pennsylvania these organizations have not only the provider side but they also have the insurance side too as well. And when you look at how progressive they are and how they're able to, you know, collaborate on other side and particularly now that we're moving from something, you know, rooting from volume to value in terms of how organizations and physicians are going to be reimburse in the future. It's going to be extraordinarily important to have like you say that 360 degree view. So for example, you know, when you're looking at

how that data can be actionable, it can be significantly more beneficial when you're looking at, you know, cost but also outcomes and how you're looking at that clinical side and then also depends on sort of organizations are doing a lot and around that, you know, again I think it's an area that's still early on I mean most organizations did not **(18:21 Inaudible)** sophisticated at it, at this point in time, but it's something that, you know, we're going to see more and more in the future particularly when you look at, you know, accountable care organizations, and how they're required to collaborate with one another and the amount of risk that's required for them to take on, it's going to be something, again the -- this organization have to -- I have to embrace and marry up that information.

Mark Masselli: I know we have at our community health center we're about eight years into an electronic health record, but I know one of the things that we have to do is -- we draw all of that data down, put it into data cubes and minded ourselves, and -- and I want to get back to your report which was analytics the nervous system of IT Enabled Healthcare. Part of the reason we do that is there are so many holes in the current electronic health records system and for other practices obviously who are on paper there's almost in -- it's not conceivable that they could mind that data. So we've got a lot of folks out there, big players you mention the ONC the office of the national coordinator the civic comments and others, trying to close the loop hole around this in generated system for a unified platform. So on one hand tell us how those folks are doing and the progress they're making and you mention a couple of folks who are getting it right, maybe drilled down if you've got any examples of smaller scale institutions I think everybody knows the sort of common ones that are thrown around anybody that your excited about it a smaller scale that might be more accessible to smaller practices that might be listening to us.

Waco Hoover: So quiet frankly this is one of the biggest issues preventing us from realizing the full value of electronic health record and having patient health information in an electronic format. Now that, you know, the federal government has for the most part said that you know, list in the private sector and need to solve this rather than mandating specific standards that, here's what we're going to use, and here's how we're going to exchange data. And that's provide opportunity in the private sector but it's also created I think frustration, now some interesting things that are happening on that fund is just back in March, the commonwealth alliance was actually announce and that's a **(20:31 Inaudible)** some of the largest vendors for example ALTSGRAAF, Cerner **(20:35 Inaudible)** and a number of others, that have come together and said listen we're going to work together and put together a way where, within their own platform they can exchange that information **(20:44 Inaudible)** epic is another technology vendor if you are a epic customer on care everywhere and if I'm a patient and I go to another health system that also has epic care everywhere, the idea is that those systems can talk engage one another. And I think is a -- an interesting trend that we're seeing now, when you look at the footprint that these electronic health record vendors have across the country, you know, there are the HIE groups that are out there that actually help exchange that information in data, that's what they're under the business of exchange that information. And I think it's a -- a rather profound and important friend, and

particularly when we look at the amount of money that have been expended on health information exchanges, you know, at a local level in different regions across the country and how so many of them have not proven to be sustainable the big point for me to drive home is the fact that this is an area that still needs tremendous work and until we can solve this challenge we're still going to struggle to leverage electronic health records and health information technology in the way that it was meant to.

Margaret Flinter: We've been speaking today with Waco Hoover cofounder and CEO of the Institute for Health Technology Transformation, one of the nation's leading organizations committed to bringing public and private sector leaders together to foster the growth and effective use of technology in the healthcare industry. You can find their full report and more about their work by going to www.ihealthtrend.com Waco thank you so much for joining us on conversations on healthcare today.

Waco Hoover: Thank you very much it was a pleasure.

(Music)

Mark Masselli: At conversations on healthcare we want our audience to be truly in the know when it comes to the facts about healthcare reform and policy. Lori Robertson is an award winning journalist and managing editor of FactCheck.org a non partisan non profit consumer advocate for voters that aim to reduce the level of deception in US politics, Lori what have you got for us this week.

Lori Robertson: Well Mark and Margaret this week we'll take a look at the individual mandate that's part of the Affordable Care Act, it kicks in January at that point Americans with the few exceptions will be required to have health insurance or there'll be a **(22:52 Inaudible)** penalty, there are exemptions from that requirement primarily for low income persons. Those who earn too little to be required to file tax returns are exempts that would be those earning up to $9500 dollars a year or $19,000 a year for a married couple in 2011. The threshold for 2014 will be a bit higher also exempts our employees who are asked to pay more than 8% of their house hold in control work based converge and person who have suffered a hardship and obtaining insurance as determine by the secretary of health and human services. Finally the law exempts members of Indian tribes certain religious groups that are exempt from social security taxes and those with only brief gaps and insurance coverage. As for everyone else if you don't have health insurance you'll pay a penalty it's$95 dollars for the year in 2014 but it goes up to $695 once it's fully faced in, in 2016. And then form there increases with inflation each year. And those with higher incomes will pay 2.5 % of income that exceeds the threshold for filing a tax return, how many will pay this penalty well the congressional budget office estimates have indicated that about six million Americans will pay penalty yielding six billion dollars for the government. And that's my FactCheck for this week, I'm Lori Robertson, managing editor of FactCheck.org.

Margaret Flinter: FactCheck.org is committed to factual accuracy from the countries major political players and is a project of the Annenberg Public Policy Center at the

university of Pennsylvania. If you have a fact that you'd like checked, e-mail us at CHCradio.com we'll have FactCheck.org's Lori Robertson check it out for you here on conversations on healthcare.

(Music)

Margaret Flinter: This is conversations on healthcare, I'm Margaret Flinter.

Mark Masselli: And I'm Mark Masselli peace and health.

Conversations on healthcare broadcast from the campus of WESU at Wesleyan University, streaming live at Wesufm.org and brought to you by the community health center.