(Music)

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

Margaret Flinter: And I am Margaret Flinter.

Mark Masselli: Well Margaret, Christmas time is here, a time for family and coming together and sharing of good tidings and looking back on year well-spent. Perhaps the biggest change in terms of health care is the roll-out of the new online insurance marketplaces. For the first time, Americans seeking coverage are able to shop for plans online through online insurance marketplaces.

Margaret Flinter: And for the first time, Mark, those folks who are seeking that coverage cannot be turned away due to pre-existing conditions and they can't find their coverage ended because they got sick. This is so huge for the country, and as we know, change of this magnitude doesn't come easily and there's certainly been a lot of complexity connected to the roll-out of the online marketplaces and Obamacare in general, so no shortage of challenges.

Mark Masselli: But there will be continued corrections moving forward.

Margaret Flinter: Open enrollment does continue through April 25th if you are going to be able to get coverage in 2014. So those are really important dates for people, and I think as the message becomes more clear, we will see more and more interest in getting that coverage in place.

Mark Masselli: But Margaret, a recent AP poll shows that three in four Americans are blaming the Health Care Law for higher premiums. I think that's probably opinion now, not necessarily judgment. We have seen it go up and down over a long period of time.

Margaret Flinter: Well Mark, even if you look back just on 2013, I have to keep coming back to the same conclusion, we have come a long, long ways towards a true shift in health care in America and making health care a right for people, been bumpy but the tide is turning and that hope of triple aim, better care, better quality, containing cost I think is going to come to fruition.

Mark Masselli: There is a sea change in technology side in health care, also slow in coming but coming nevertheless.

Margaret Flinter: Well innovation is something our guest today knows quite a bit about. We are revisiting our conversation with a remarkable innovator in the health care arena. Dr. Patrick Soon-Shiong is a physician inventor, 50 patents to his name, mostly in the pharmaceutical and biotech space, but also the Head of the Bipartisan Policy Center's CEO Council on Health and Innovation.

Mark Masselli: He is leading a team of some of the nation's most successful CEOs to build an information superhighway for health care that will take into account a patient's genomics and proteomics to accelerate the pace of health information exchanges. He is doing some really exciting work.

Margaret Flinter: And the Managing Editor of FactCheck.org pays us a visit. Lori Robertson checks into claims that are being made that some insurance premiums will double.

Mark Masselli: But no matter what the topic, you can hear all of our shows by Googling CHC Radio, and as always, if you have comments, email us at www.chcradio.com or find us on Facebook or Twitter because we love to hear from you.

Margaret Flinter: We will get to our interview with Dr. Patrick Soon-Shiong after Headline News with Marianne O'Hare but first, let us all hear at Conversations on Health Care wish you a very happy holiday.

Mark Masselli: Happy holidays and peace and health in the New Year.

(Music)

Marianne O'Hare: I am Marianne O'Hare with these Health Care Headlines. It's the end of the year and all is clear. The spotty roll-out of the health insurance exchanges continues to dominate the message of the Affordable Care Act. The Obama Administration has been aiming for 7 million Americans who have signed up on those health insurance exchanges during open enrollment, and while the pace is picking up and in some cases dramatically, the numbers are falling short. While some 2.3 million Americans have opened accounts on www.healthcare.gov or some of the state sites, 1.9 million had yet to sign up for plans by mid December. Open enrollment continues through April 15th but folks seeking coverage by January 1st need to have signed up by now. Some states are doing very well by most accounts, those states who have setup their own exchanges. But other states have been plagued by issues since the start, with Oregon being the most problematic.

Meanwhile, one of the goals of the Health Care Law is to pull back the lid on price secrecy in health care and that is something that is coming to fruition in fits and starts. A recent survey of New York area hospital showed a dramatic price swing from hospital to hospital for similar procedures. The organization catalyst for payment reform points to New Hampshire as a model. Its state website allows consumers to plug in their insurance plan, hospital and procedure and get an accurate projection of real out-of-pocket cost. I am Marianne O'Hare with these Health Care Headlines.

(Music)

Mark Masselli: We are speaking today with Dr. Patrick Soon-Shiong, physician, scientist, entrepreneur and co-chair of the Bipartisan Policy Center's new CEO Council on Health and Innovation, which is combining the efforts of CEOs from some of the nation's largest corporations to develop strategies that will improve employees' health and wellness and lead to more cost effective health care. Dr. Soon Shiong is the founder of numerous pharmaceutical entities and is responsible for over 50 patents for groundbreaking drugs and medical procedures. He is Chairman and CEO of the Institute for Advanced Health and the Healthcare Transformation Institute. He also founded the National LambdaRail and NantWorks, LLC, whose mission is to converge semiconductor technology, supercomputing advanced networks, improving innovations to revolutionize the health care delivery. Dr. Soon-Shiong, welcome to conversations on Health Care.

Dr. Patrick Soon-Shiong: Thank you.

Mark Masselli: You know, the Bipartisan Policy Center just announced the formation of a group that you are co-chair of, the CEO Council on Health and Innovations, which features CEOs from some of the most formidable companies in the country. And the goal is to highlight innovative strategies that are going to improve the health and wellness of employees working for those large corporations. You know, Margaret and I both have a good friend Mike Critelli who was Chairman and CEO of Pitney Bowes, and we know when Mike was CEO, he had a real passion for this type of transformation in his setting. Tell us a little bit about the collaboration that you have built and some of the key players and the passion that really drives the team.

Dr. Patrick Soon-Shiong: So you mentioned Mike Critelli and he and Craig Barrett had created this organization called Dossia with the concept that really the private sector and the large employers could significantly impact this country by transforming health. And I had the good fortune to meet with visionary leaders such as Muhtar Kent at Coca Cola and Lowell McAdam at Verizon and Brian Moynihan at Bank of America, who had the very same passion, wanting to make a real difference not only to the employees but to the nation with regard to health care. So this council I think I honestly believe will be one of the most important impactful organizations that will really drive action rather than just a council for policy or as a think tank. And these are very, obviously not only visionary leaders but operational leaders who run major corporations and see health care as a crisis for our nation. And I am just honored and proud to be a part of this organization with Muhtar, myself and the rest of the board.

Margaret Flinter: So Dr. Soon-Shiong, I think I understand that the CEO Council on Health and Innovation isn't planning to issue a report on strategies or best practices until next year. So what kind of strategies are you planning to focus on, can you give us a glimpse into that, that look to have the most potential?

Dr. Patrick Soon-Shiong: Let me give you little bit of the history. About four years ago, I met with Brian Moynihan at Bank of America with a concept that collectively we needed to create an infrastructure in this nation, a fiber infrastructure, such that information sharing could occur to address not only chronic diseases but things important like cancer. And then I met with Lowell McAdam at the Verizon level and we participated together in the World Congress on Health and we found the same passion. And then I met with Muhtar Kent. And so over the course of the last two years, we have actually quietly implemented tiny little pilots inside our own organizations. And what I am excited to say is that the implementation is actually moving forward in real time as we speak, and the CEO Council is the first public announcement so to speak.

Mark Masselli: Cam you tell us about the sort of three-pronged approach that's being used by the CEO Council to improve health and wellness of employees and how it aligns with the goals of the Affordable Care Act?

Dr. Patrick Soon-Shiong: We need to figure out a way to manage the patients in the continuum of the entire life when they are well but on the other hand, when they are desperately ill. And then there is a third element in between when they have hypertension, asthma, diabetes, obesity, and what we call **willingness**. So you have wellness, **willingness** and illness. And the private sector is the one that is actually going to be able to do this much faster than the government can. So the mission of the Council is to implement innovative strategies to take advantage of the wireless technology and advanced computing and the Cloud technology that currently exists today and apply that. So we have implemented strategies that unfortunately can only be done with areas of speed and implementation between the private sector, the nonprofit sector and philanthropic sector, and then finally, the NGOs and the government. So this is very much an implementation council of actually testing and validating technologies at large scales so that it could be implemented across this country but also be used on a global basis. The Council is to look at health care delivery systems, to address coordinated care, to address wellness programs that are real and measurable, to address illness programs where we take advantage of the genome and the proteome that's going to enter in all areas of care.

Margaret Flinter: Well Dr. Soon-Shiong, I think we know that there has been so much innovation over the last decade I would say around strategies to change behavior. We would really be interested in hearing about some of the specific strategies and what the breakthrough is in the thinking or the implementation or the innovation that moves this ball forward.

Dr. Patrick Soon-Shiong: I think the issue is let's talk about cancer for example. I don't think what people realize in our country now, we have over 20 million cancer survivors and there are two million cancer new diagnoses a year. There are 40,000 patients with breast biopsies a year that are read for the wrong

patient, 20,000 prostate biopsies a year that are read for the wrong patient. Would it be acceptable for example that we now know from 2001 to 2005 in California that patients with pancreatic cancer received the wrong treatment 65% of the time?

I think these are the kind of statistics that are not only unacceptable, it's unconscionable that we not address. So we ask ourselves how is it possible for us ever to be able to bend the cost curve or even get the best care when we are spending more than any other country in the world and ranking lowest on the tables. And the question is very simple, how could we ever hope for example in cancer to bend the cost curve and get the right treatment when we don't know what the right treatment is to be given before treatment begins. If you have pancreatic cancer, the dogma is that you have a standard of care which is the current standard of care which is a single drug which is on the market. The survival rate is maybe two months to six months. Yet, if we were to tell you that if in fact you had the correct treatment and the correct molecular profile, the opportunity for you to be free of disease, completely free of disease and be alive five years out, and in fact, we say we now have multiple patients with that exact statistic.

So this is the challenge that there is no such thing as I call a national information highway and the interoperable system that for the first time connects not only the knowledge base of the nation and the collective wisdom of the nation to the delivery system but also connects the delivery system to the payment system. On the knowledge system, we are making such amazing breakthroughs and we will make more scientific technical biological breakthroughs within the next five years than we made in the last 50 years based on the genomic and proteomic science. But that information will not enter into the delivery system; it may take 10 to 17 years to enter the delivery system. When you go to the delivery system, there is a total disconnect and absence of any coordination of care.

So there is actually a non-system of care and a quite dangerous system of care because not only the knowledge is not available, but the coordination doesn't exist. When you come to the payment system, the only way the providers are incented is to do as much procedures as possible because it's a fee-for-service based system. There is no ICD-9 code for **healthy**. So then if you look at the knowledge system, the delivery system and the payment system, the barriers between these three create such a non-system of care. It's no wonder we spend $4 trillion and have no way of accountable value-based care, no way of measuring outcomes and no way of having real-time knowledge that can actually be actionable to change the clinical direction and the clinical cost.

That's the strategy we have taken in the last five years to seven years to build an infrastructure across this nation that you would then tie the knowledge system to the delivery system. And inside the delivery system, you would create a coordination of care and then tie that to the payment system, so that the payment

system incents health rather than illness and mitigates from illness to wellness back to wellness. And I think the CEO Council now finally reaches the payment bucket to completely change the payment system and to incent the providers or a healthy human being.

Mark Masselli: We are speaking today with Dr. Patrick Soon-Shoing, a physician, scientist, entrepreneur and co-chair of the Bipartisan Policy Center's new CEO Council on Health and Innovation which is seeking collaboration among some of the nation's largest corporations to develop strategies that will improve employees' health and wellness and lead to more cost-effective health care. You have been talking about this knowledge network that works with the delivery system and the payment system, and I wonder if the delivery system isn't at the heart of the problem here, this whole quality improvement process. How are you thinking about change management when you are thinking about the delivery system because it's a radical redesign that's needed?

Dr. Patrick Soon-Shiong: And nothing motivates more than change management by incenting payment to adopt the change. On the delivery system itself, you are completely correct. The greatest fear I had when the Health Information Technology program was launched, and we had the $800 billion of stimulus funds, was that we would build, what we call, medical bridges to nowhere. But the embedded current software systems that currently exist in the United States totally prevent interoperability.

The only way that we would absolutely be able to get true care coordination and population management is have the capability of a patient when the patient is at home, he is in the clinic, on the community hospital, or the doctor or in the tertiary center and then back at home with continuous information exchange of real-time clinical data at the fingertips of both the patients and the provider. That technology and that interoperable system did not exist. And so I presented myself six or seven years ago to Dossia and said, "We as leaders need to create this infrastructure for the United States." That is why I took on the National LambdaRail.

The National LambdaRail is a fibre infrastructure that's NASA used to land the shuttle. So if one could then take technology that currently exists today and then the magic of what we call machine-to-machine learning, wireless technology, whereby vital signs could be monitored directly out of the machines, and then we integrate that data continuously into the cloud with all the clinical labs and the imaging and tie that to the activity down to the activity level of whether it's a nurse practitioner, whether it's a doctor, physician's assistant and provide them both transparency and clarity of treatment, and then be able to monitor the outcomes in real time and create continuous learning systems across the continuum, we will then truly transform this care.

So I presented this plan around 2008 to the Institute of Medicine at the National Library of Medicine to initiate this on the country. And unfortunately, I could not get the government agencies to adopt this. So we then left out on our own and created the Institute of Advanced Health. And let me share with you now with excitement where we are. In order for the doctors to know what is the right treatment to give these thousands of different clinical protocols with hundreds of subtypes, it's beyond the cognitive (17:37 inaudible) how the doctor to understand what treatment to give.

We have through a Software-as-a-Service in the Cloud now deployed this decision tool amongst 8000 oncologists as we speak today. And the insurance companies have now been given a tool to approve the payment and know in real time before treatment begins that the patient and the doctor is getting the right evidence-based treatment. If we can then capture the vital signs of a human being in a hospital and at home, now there is 4000 different medical devices out there, we have created APIs that can message and talk to every one of these medical devices. This year, we will be capturing three billion vital signs across the United States, so that these vital signs will self-populate the electronic medical record regardless of what the electronic medical record is.

If you can now tie that information across the continuum from the patient when the patient goes to the clinic with a software system that actually captures the activity and cost in real time, we have now adopted that, and that's running across three million lives in the United States today in cancer patients. If you can then interconnect that to imagings of CAT scans, if you could take these CAT scans and PET scans and put the data into supercomputer so that instead of a 64 slice images or 120 slice images, you have a million images because it's every second of the data, you then have a way of creating image in the Cloud down to the patient.

We now have this deployed at places like Cleveland Clinic and Mount Sinai and have 14 FDA approvals to deploy this across the nation. We recognize that all the information we ultimately need will come out of a blood test, and the blood test will be the genomics but not just genomics but leapfrogging to proteomics. You need then a supercomputer to manage this kind of analysis because this kind of analysis right now takes 11 weeks to do for one patient. So that's why we built a supercomputer that has now taken 6000 human genomes, 3000 patients and computed that complete analysis in 69 hours. That translates to the fact that we can now complete the analysis for one patient in 47 seconds.

The images that can be analyzed are from any CAT scan any MRI and placed into a connected device in the patient's and doctor's hands. The vital signs that could be captured remotely from machine to machine and self-populate your data, and the decision support tools, that is all evidence-based. All of a sudden, we have a real learning system that is totally scalable, and that's the strategy that

we have been deploying, and that's the strategy we can deploy across this nation through the CEO Council.

Margaret Flinter: We have been speaking today with Dr. Patrick Soon-Shiong, physician, entrepreneur co-chair of the Bipartisan Policy Center's new CEO Council on Health and Innovation. You can learn more about the Bipartisan Policy Center's Council on Health and Innovation by going to Bipartisanpolicy.org, and you can follow him on Twitter @solvehealthcare. Dr. Soon-Shiong, thank you so much for joining us on Conversations on Health Care today.

Dr. Patrick Soon-Shiong: Thank you.

Mark Masselli: At Conversations on Health Care, 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 nonpartisan, nonprofit consumer advocate for voters that aim to reduce the level of deception in U.S. politics. Lori, what have you got for us this week?

Lori Robertson: Well, House Speaker John Boehner's premiums are going up. He says his premiums will double, and his deductible will triple under the Affordable Care Act. It turns out that's true, but his experience is atypical compared with most Americans and even other members of Congress. It all shows how some will pay more and some will pay less under the law. Boehner's rates are doubling because of his age. He is 64, and his wife's age 65 plus their high income. The speaker is being forced out of his employer-sponsored insurance through the federal government and into the exchanges, thanks to a republican amendment to the Health Care Law.

Exchange plans can charge more based on age making this a costly shift for the 64-year-old Boehner. Plus, he smokes, making his premiums higher. His wife is now joining Medicare, and the couple will pay a higher Medicare premium because of their income. We reached out to representatives Joaquín Castro of Texas who is 25 years younger than Boehner. Castro chose the same plan on the exchange as Boehner did, but his premiums are going down by about 50%. In fact, he could have selected a more generous plan in terms of the deductible and still saved money. That's my Fact Check for this week. I am Lori Robertson, managing editor of FactCheck.org.

Margaret Flinter: FactCheck.org is committed to factual accuracy from the country's 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 would like checked, email us at Chcradio.com, we will have FactCheck.org's Lori Robertson check it out for you here on Conversations on Health Care.

Mark Masselli: Each week, Conversations highlights a bright idea about how to make wellness a part of our communities and everyday lives. Asthma and COPD are growing health concerns in this country. 18 million adults and seven children suffer from the condition, and those numbers are on the rise. In spite of how much is known about the disease, many with asthma and COPD have a hard time controlling it, and it's difficult to predict when an attack might happen. GPS to the rescue, the FDA has recently given an approval to a tiny device that asthma and COPD sufferers can attach to their inhalers.

The GPS device is linked to software on the user's smartphone that sends information to their clinician whenever they use the inhaler. The idea being that you can track where and when an asthma attack is triggered and logged details of the location where it happened to get a better handle on what triggers to avoid in the future. The data are also collected and **coalescent** to a larger database that can chart areas with higher incidences of asthma to inform public health decisions around controlling the disease. The asthma map has been undergoing clinical trials for several years through the CDC and has already been deployed successfully in two cities with higher than normal asthma rates, Sacramento and Louisville, now with the FDA approval of the device, Asthmapolis plans to make the product available to the general population.

Marrying simple GPS in mobile phone technology with medication use, leading to healthier outcomes for millions of asthma sufferers, 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 WESU at Wesleyan University, streaming live at Wesufm.org and brought to you by the Community Health Center.