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

Margaret Flinter: And I am Margaret Flinter.

Mark Masselli: Well Margaret, there is a lot of buzz in Washington over the looming start of open enrollment for the insurance exchanges. October 1st is the first day but it's also the start of the new fiscal year for the federal government.

Margaret Flinter: Well, the countdown has begun on both counts and some Republicans in Congress are making good on threats to find a way to de-fund Obamacare by holding up approval of the federal budget.

Mark Masselli: And there are targeted efforts underway in a number of states to find ways to block funding of the health care law. But in spite of this lingering opposition, the law is moving forward. California has tested their computer system that will handle the influx of new insurance customers, and have given the signal that all systems are going.

Margaret Flinter: Well that's great news because they are such uncharted waters for a lot of states Mark, states that in particular had to update antiquated systems so that departments that oversee Medicaid can communicate with revenue service departments. It's to be expected there will be some growing pains as these systems get off the ground and this is definitely a case where the people who upgraded early have an advantage.

Mark Masselli: They certainly do. And speaking of Medicaid, there will be an expanded eligibility for Medicaid coverage under the Affordable Care Act including folks with incomes up to 138% of the federal poverty line. But an interesting study was done on who will be taking advantage of the Medicaid expansion.

Margaret Flinter: Well, that's right, Mark. And the Kaiser Family Foundation which has done such a great job in this area did a study and found that those taking advantage of expanding Medicaid are likely to be younger white males and that's a group that's generally healthier than the typical Medicaid recipient.

Mark Masselli: Very interesting. And the study also showed that the average age of Medicaid recipients is going to drop by three years from 39 years to 36 years of age.

Margaret Flinter: Well another interesting aspect of this young adult population is that they are definitely more comfortable consuming products online and shopping online and interacting via mobile devices. So, as we see this generation going into the health insurance exchanges, it may feel more natural to them and may also help propel the advance of mobile health and telemedicine protocols, something our guest today is very familiar with.

Mark Masselli: Dr. Joseph Smith is with the West Health Institute, which is dedicated to improving health outcomes and bringing down health cost by promoting the growth of mobile health technologies.

Margaret Flinter: The institute is studying the ways that mobile health, telehealth and genomics are poised to really transform health care in the United States and across the world.

Mark Masselli: And we will hear from Lori Robertson who checks in from FactCheck.org to set the record straight about missed and misstatements about the health care law.

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

Mark Masselli: We will get to our interview with Dr. Joseph Smith in just a moment 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 these Health Care Headlines. House Republicans are moving ahead with efforts to find a way, if only symbolically, to de-fund the health care law. House Republicans have tried 40 times unsuccessfully with separate measures to de-fund Obamacare. This latest measure would tie approval of stop gap funding of the federal government to a measure that would de-fund the health care law, forcing the Democratic-controlled senate to actually vote on the measure. A recent poll showed only 6% of those surveyed felt the health care law should be defunded and that holding up funding of the federal government in the new fiscal year would have negative consequences for the GOP.

Meanwhile, corporations are shifting some pieces on their benefits chessboard in response to the health care law and its changes. IBM has announced it's dumping its retiree health benefits on to the exchanges, not the Obamacare exchanges but on Medicare exchange. Medicare eligible retirees will no longer be eligible for IBM's company health plan, instead they will get a subsidy to buy supplementary Medicare coverage. This is the continuation of a trend. Time Warner has announced a similar move recently as has General Electric last year.

Know someone who is trying to quit smoking? You might have a new motivating weapon, graphic television commercials showing real smokers dealing with the devastating effects of long term exposure to the habit. It's part of the federal

government's Tips from Former Smokers Ad Campaign, in which graphic images of smokers who had suffered from throat or other cancers, inserting false teeth, placing speaker boxes in their tracheotomy hole, talking about why you should quit. A study shows that off the nation's 45 million smokers, 1.6 million tried to quit after seeing the ad and 13% were successful in staying smoke-free. Historically, about half the nation's 45 million smokers try to quit every year and yet cessation rates still only hover around 5% annually.

I am Marianne O'Hare with these Health Care Headlines.

(Music)

Mark Masselli: We are speaking today with Dr. Joseph Smith, Chief Medical and Science Officer at West Health, which includes the West Health Institute and the West Health Policy Center, non-profit entities founded by philanthropist Gary and Mary West, dedicated to advancing technology in health care that will lead to a lower cost and better health outcomes. Dr. Smith is the Former Vice President of Emerging Technologies for Johnson & Johnson, and also served as Chief Medical Officer for Boston Scientific. He was named by HealthLeaders Magazine as one of the 20 people who make health care better. Dr. Smith, welcome to Conversations on Health Care.

Dr. Joseph Smith: That's a pleasure. Thank you so much for having me.

Mark Masselli: We always seem to be at some critical juncture in health care in America, and certainly over the recent years, the cost for health care has skyrocketed. It accounts for about 18% of our gross domestic product, and people say it's been growing at an unstable rate, and yet, we have the passage of the Affordable Care Act, created a lot of new opportunities not only for including more Americans in the health care system but also for generating discussions about the need to contain cost. Share with us and our listeners your goal at West Health of lowering health care costs but also improving patient outcomes.

Dr. Joseph Smith: Well you know it's funny you talk about how we always seem to be at a critical juncture in health care. I am not sure that we have always faced the challenges that we currently face. I was reading a report a little while ago that says that if things continue as they are, by 2030, the median family income will equal the median family expense on health care including insurance and out-of-pocket expenses. And I don't think we are actually going to head there. I think we know that we need to be in a different spot and I think all of the national focus on health care reform I think is timely, it's essential, it's probably overdue. I would point out that much of the Accountable Care Act is reform about how health care is paid for and not so much about how health care is delivered. And that's really where we think there needs to be a much sharper focus and I think there is an opportunity to decentralize, perhaps democratize,

and in the process, maybe even demystify some of health care delivery. We see four different areas for impact that draw a lot of attention for us. The first is in an effort to create more of an efficient medical marketplace, you would not think of going into a restaurant and having the maitre d' decide what you should have for dinner and then send you the bill three months later. I mean yet, that's the way health care gets apportioned, delivered and paid for. And so we need to take advantage of all of the natural skills we have in assessing value in the things we need and we purchase and apply those to health care.

Margaret Flinter: So Dr. Smith, you are trained as and practiced as a cardiologist but you also have an extensive medical engineering background, and you said that we are at this fertile intersection between engineering and medicine. Tell us more about that. What are the collaborations at this intersection that you are tracking out at West Health?

Dr. Joseph Smith: I love this space. I have spent my whole career at this what I think is a wonderful intersection between engineers who are inherently problemsolvers and health care which is really not short at all of problems. And so I think there is a tremendous opportunity to make a difference. Technology itself, when appropriately applied, has dramatic opportunity to lower health care costs. We are working under the rubric at the moment that chronic diseases ought to be managed apathetically at encounters in doctors' officers or emergency rooms or hospitals as opposed to when a patient needs to be seen. And I think we can completely change that paradigm of chronic disease management. I mean when you have complex equipment, you don't wait for it to start making a funny noise in order to service it. We have dashboards on our cars that tell us how things are going so that we can make those interval changes to keep it functioning well. We have all of that for technology that we care about and yet we don't do that for chronic disease management where we really could. And so the notion of using little bits of technology to look in on patients who aren't in front of a doctor, who are in their normal activities of daily living or who are sleeping, and look in using relatively simple bits of technology, to get a dashboard on how is that person doing. So that patient with heart failure, if they have gained a couple pounds and when they walk up a flight of steps it's a little bit slower for them, all of that information is readily accessible, and if we just bothered to look at it and use smart systems that we have in place for other complex machinery, we would be able to identify those people who are beginning to fail as opposed to waiting for them to get so sick.

Mark Masselli: Well, let's pull the thread a little on that and talk about mobile technology. And with billions of people possessing cell phones in the world, you say we are just not utilizing this platform for delivering better health care in a meaningful way yet. You say that we need to move our health care system from moving the patients to moving the data to serve the patients. So how do we achieve the ends when we have a relatively siloed health care system at present?

Dr. Joseph Smith: So siloed is perhaps an understatement and I do think that speaks immediately to the need here. I think we have an inherent problem which I think we have lots of systems that each manage data different ways and store and transmit and query and answer differently. And so this notion that if you are a Mac user, as I am, the notion of every time you get another piece of Mac hardware, the other hardware works with it just fine. And it was all easy, it was all functionally interoperable immediately, and we have none of that benefit in health care. We have every different vendor making information slow, using their own proprietary formats and processes in part because we have this desire to make sure that health care information is both secure and timely, but I think one of the downsides is that we have created every different company that makes one of these gadgets has its own way of moving information around. And that frustrates the notion of the value proposition of the puerility of these solutions so that we longer depend on each device alone to manage all of the concerns around a patient but we can use a smarter net of devices that can all talk to each other to get a better more holistic view of how an individual patient is doing or populations of patients are doing. We have it in terms of an Internet backbone; you don't need to buy a specific computer or a specific cell phone to get on the Internet. We do not have that for wireless medical devices or electronic medical records. It's all been siloed up and diced up with lots of little proprietary walled gardens that are really getting in our way at this point.

Margaret Flinter: One of the things Dr. Smith in clinical facilities specifically seems to be this whole issue as you pointed out there about the wireless revolution that has come. And clinical facilities are challenged to provide a system that's both secure and it's high functioning and you have noted that there is these three elements impacting broadband use in the clinical setting. You have got the patient monitoring system obviously critical, two you have the technology that handles the business and the data side, and three we have got that Wi-Fi user walking in the door everyday. So how do you envision these three tiers being effectively managed either in the health care facilities of today or the clinical facilities that we are trying to build for the future?

Dr. Joseph Smith: Well, I think the good news is people are readily admitting that there is an issue and a concern here. You would like not at all to have the young grandson of a patient downloading a video in the waiting room and have him use up the critical bandwidth that's necessary for monitoring his granddad in an intensive care unit, right. So on one hand, you would say well I am sure that doesn't happen, but if in fact we are all using a shared resource without some notion of prioritization, that can of course occur. And so one of the fellows working with us here used to be president in a wireless private company before but now is working with us in a nonprofit setting. He's architected what we call Medical Grade Wireless Utility, and it's a solution for that issue that manages the appropriate resource distribution in hospitals and it's something that we have architected and made really available for hospitals. And Ed has now worked

with, he tells me, I think almost a 100 hospitals and trying to get them up to speed. So there is this notion that wireless communication can be as dependable and reliable as power and oxygen and lighting in a hospital.

Mark Masselli: We are speaking today with Dr. Joseph Smith, Chief Medical and Science Officer at West Health, which includes the West Health Institute in San Diego and the West Health Policy Center in DC, nonprofit entities dedicated to advancing technology in health care that will lead to lower cost and better health outcomes. Dr. Smith is a fellow at the American College of Cardiology. Dr. Smith, you mentioned just a few minutes ago, liberating health data and I was thinking about our good friend Todd Park, who is now the Chief Technology Officer. And tell us a little more about what the bigger picture is of how you are going to liberate data and how that's going to help us build a sufficient, effective and elegant health care system with just in time delivery of health information when you need it.

Dr. Joseph Smith: Well, it's a tall order and I think almost anyone's enthusiasm would pale next to Todd Park.

Mark Masselli: We agree.

Dr. Joseph Smith: I have watched him talking; he gets up in a lather, and I think it's because there is this remarkable opportunity. When you look at what the good Mr. Park has open to him in terms of data that Medicare and Medicaid has collected over processes and procedures they have paid for and then outcomes they can track, I think there is an opportunity to ask all sorts of questions, particularly when you introduce new technologies and you can determine how they are used but then whether or not the outcome is in fact represented in a larger cohort in a real world scenario. And so I think we have one of our fellows working closely with Todd to see if there is an opportunity to enhance the clarity and the transparency associated with large datasets and see where there may be the greatest possible opportunity to make a difference.

Margaret Flinter: Dr. Smith, your colleague at West Health that we referenced a little while ago, Dr. Eric Topol spoke about the need for training the next generation of health care providers. That's a subject near and dear to our hearts in primary care, and to train them to understand these emerging areas of genomics and telemedicine and other innovations in care that are contributing to the transformation of health care. Tell us about how you at West Health are approaching innovation in health professional training in your fellowships and how might these fellowships and the training that you are doing disrupt the traditional model of health profession's education.

Dr. Joseph Smith: We have talked about how fertile this intersection is between technology and medicine, and it does require energized individuals. We are lucky to have a couple of these present with us at (15:24 inaudible) Wireless

Health Scholars. This is the notion of taking folks who are already trained physicians, many board certified, exposing them to the engineers and kind of the technology that may be amenable to use in clinical scenarios where people really haven't explored the full opportunity. And then we also have a fellowship with the UCSB here as well. As energized as they are, they are still too few. So we are trying to set an example of how to do this. And one of them came up with a really cool idea and we have been able to provide enough resources that here in the near term that's likely going to be its own little startup company because the idea looks like it could really make a big difference. And so we love this opportunity. It is again this fascinating collision between energetic people and a tremendous need, an unmet need to make health care much more affordable. And so San Diego is a terrific environment for that because unlike the East Coast where I did all my training where the model is one more of excellence through local competition, here there is more of a model of excellence through collaboration. And so of course it takes smart people in the middle and so we are delighted to have these fellows take advantage of the opportunity.

Mark Masselli: Well you not only have smart people but you have a sweet organizational design at West Health and you have two not-for-profit branches and you also have two for-profit branches, the West Health Investment Fund and the West Health Incubator. We are always it seems at the garage phase of innovation around health care. And it looks like you have got a nice collaboration that goes on to support the activities that go on. Tell us about some of the promising investments that you have made as well as other innovations that are underway at West Health.

Dr. Joseph Smith: The structure that we have adopted with the four organizations is not accidental. If you come up with a good idea, or if you see other people with them, how do you then go the next step? And so part of that is small business incubation. If you think about an innovative and entrepreneurial community, it's really everywhere, and so how do you accelerate the work of others, and that got to us to starting an investment fund. And then ultimately, it doesn't really matter if you come up with a great solution if the public policy environment or the incentives for payment aren't aligned so that they can be appropriately used, and so that got us to be quite active in Washington DC at a policy center.

To spend a moment on the investments, all of the investment proceeds go back to the charitable mission and all four of these organizations share the same vision and mission which is how to lower health care cost in United States. Along the Big Data theme, we have a small investment in Humedica. It's a Boston-based company that's looking really hard to make sure that when you look at Big Data, collected from multiple hospital systems, you are not going to get kind of waylaid by casual descriptions of patients. And they do natural language processing of doctors' notes to better understand that when someone gets coded

as having diabetes do they really have diabetes, or if they are exposed to a particular therapy are they really taking it. So we like them for the Big Data play.

In terms of health care transparency, particularly transparency around pricing, we like a small company that we invested in called Change Healthcare. And they are working with large employers to make sure that when their employee population needs to make a health care decision, that they understand the price and as best they can the value. And then when we think about this notion of taking care of people with chronic diseases when they are not in the hospital, we have invested in a small Minnesota Company called Healthsense. And they work very hard to look at these kind of continuing care models of retirement communities where you will have a spectrum of different forms of living scenarios on one campus to instrument the apartments and the people's homes so that it's easy to look in on them either from the vantage point of the organization or even from their family to make sure that mom is up out of bed, she is taking her medicine and everything is pretty much okay, or not. And that gives you a way to prioritize who you need to check in on any given day and so this notion of less intrusive but appropriate at distance monitoring to make sure that people are doing okay with their chronic diseases. We like that as an opportunity going forward.

Margaret Flinter: We have been speaking today with Dr. Joseph Smith, the Chief Medical and Science Officer at West Health whose unique mission is to advance innovative and cost effective technology, innovations and solutions that will lower the cost of health care in America. You can find out more about the work they do by going to www.westhealth.org and follow them at West Health. Dr. Smith, thank you so much for joining us on Conversations today.

Dr. Joseph Smith: And thank you today. It's been a real pleasure.

(Music)

Mark Masselli: At Conversations on Health Care, we want our audience to be truly in the know when it comes to the facts about health care 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 US politics. Lori, what have you got for us this week?

Lori Robertson: Well, over the years, we have debunked the claim that Congress was exempt from the Affordable Care Act. It wasn't true in 2010 when the law was being debated and it's not true now either. Congress isn't exempt from the law's requirement to have insurance or pay a penalty if you don't. In fact, the law places an additional and unusual requirement on members of Congress and their staff. It says that members and staffers must get their insurance through the exchanges created by the law starting in 2014. They can't get insurance, like

they do now, or like other federal employees, through the Federal Employees Health Benefits Program. This provision was added by a Republican amendment with the idea that if the exchanges were good enough for other Americans they should be good enough for Congress.

There is a problem though. The provision doesn't say anything about the federal government being able to continue to contribute to premiums of staffers and lawmakers just as many employers do for their workers. In August, the Office of Personnel Management, which administers the Federal Employees Health Benefits Program, issued a proposed rule saying that the government would be able to continue to make those premium contributions and the contributions couldn't be greater than what the government provides under the Health Benefits Program for other federal employees. That prompted new claims of Congress being exempt from the law or getting a special subsidy. But the supposed special subsidy is simply the premium contribution that Congress's employer, the federal government, has long made to the health plans of its employees. And 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 www.chcradio.com. We will have FactCheck.org's Lori Robertson check it out for you here on Conversations on Health Care.

(Music)

Margaret Flinter: Each week, Conversations highlights a bright idea about how to make wellness a part of our communities and everyday lives. Sitting down, it seems, can be as potentially deadly as smoking if done for long periods of time and over a long period of time, and that's not good news because we are a nation of sedentary sitters. And it turns out sitting is a big contributor to our obesity epidemic, to the rise in diabetes and heart disease and a host of other illnesses. So when Steve Bordley was injured in an accident a few years ago, the active former elite athlete ended up sitting in a wheelchair for almost two years, and during that time, he gained a lot of weight. And when he had to learn to walk again, this former distance runner began to see the health benefits of just walking not intensely but consistently throughout the day. Now the surgeon general recommends 10,000 steps a day to maintain good health.

Steve Bordley: 10,000 steps a day is kind of the benchmark that the surgeon general has set for the minimal amount of steps that an American should take. And the University of Tennessee, about two years ago, did a study and found that the average American walks less than half of that amount. So we are actually deteriorating if we are walking less than that.

Margaret Flinter: And when he was able to go back to work, he worried he was going to slide back into the pitfalls of sitting. His solution, he created the TrekDesk. Bordley designed a modular standing desk that fits over any exercise machine, the idea being if you just walk slowly but consistently, the effects would be tremendous.

Steve Bordley: I was literally walking 10 hours a day, very slowly, and within a period of about six weeks I lost more than 25 pounds, my back problems went away and I was sleeping like I did when I was in my 20s. I felt tremendous.

Margaret Flinter: And some research to date bears him out. Walking slowly throughout the day does seem to do remarkable things for your health, reduce your chances of getting type II diabetes, reduce the risk of certain cancers and maybe even reduce the incidence of first heart attacks. And it runs about \$500, maybe 10% of the cost of some high end models for exercising out there, and it can be assembled in under an hour.

Steve Bordley: People should at least move throughout the day. Whatever they can do to move is critical to their health and that's really the message that we are trying to get out. \$10,000 steps at a minimum, everybody should know the amount of steps they are taking during the day.

Margaret Flinter: The TrekDesk, a simple reconfiguration of the typical workspace but one that allows for purposeful movement throughout the day, improving health and well-being and cognitive skills, 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 www.wesufm.org and brought to you by the Community Health Center.