Mark Masselli: This is Conversations on Healthcare, I am Mark Masselli.

Margaret Flinter: And I am Margaret Flinter.

Mark Masselli: Well Margaret pleased to hear the new ruling recently from the FDA. They are expanding the regulatory control over all smoking products containing nicotine beyond cigarettes, cigars and chewing tobacco most importantly e-cigarettes and vaping which has increasingly become a portal into nicotine addiction for young people.

Margaret Flinter: The e-cigarette business is booming because \$3 billion a year business now and of particular concern of course is the way the products are being marketed to children and young adults.

Mark Masselli: A survey done by the Center for Disease Control and Prevention has shown that e-cigarette used among high school students has surged in recent years from 1.5% in 2011 to 13.4% in 2014, that's dramatic and very dangerous trend.

Margaret Flinter: And tobacco companies behind these products are marketing hundreds of flavors that appeal to young people flavors like bubblegum and cotton candy. And that CDC study also discovered that those kids who started vaping regularly a significant percentage will switch to regular cigarettes within a year.

Mark Masselli: These new rules will ban the sale of any of these products to anyone under 18 years of age. Teens who become addicted to nicotine often become lifelong smokers which exacts a devastating toll both in terms of health outcomes but also in out-of-pocket cost.

Margaret Flinter: And smoking remains the leading cause of preventable death in this country and the toll in healthcare cost out-of-pocket expenses to purchase these products are in the tens of billions annually. So preventing the next generation from becoming nicotine addicted is of vital importance and these new rules hopefully are going to have an impact.

Mark Masselli: And speaking of health cost it's now estimated that America spends somewhere in the region of \$3.4 trillion per year, just a staggering amount of money. And our guest today is really well-known in the health industry, he is an analyst and author of a newly released Casino Healthcare: The Health of a Nation: America's Biggest Gamble. Dan Munro explores the dysfunction underlying the extreme cost of healthcare in this country and what might be done about it.

Margaret Flinter: And Lori Robertson will be stopping by as well, the managing editor of FactCheck.org, but no matter what the topic, you can hear all of our shows by going to chcradio.com.

Mark Masselli: And as always if you have comments, please email us at chcradio@chc1.com or find us on Facebook or Twitter; we love hearing from you.

Margaret Flinter: We will get to our interview with Dan Munro in just a moment.

Mark Masselli: 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 healthcare headlines. The recent untimely death of the musical artist Prince at age 57 elucidates a growing problem in the middle-aged community. Those close to the case point to the artist's growing dependence on prescription opioids as the cause if so, he is not alone. In 2013 and 2014 according to Centers of Disease Control and Prevention, people between 45 and 64 accounted for more than 40% of all deaths from drug overdose millions of people are on opioids, most of them over 45 years old. And that means some are at risk of overdose, 47,000 people died of overdose in 2014, the Whitehouse has targeted opioid addiction as a key medical crisis facing our country.

Meanwhile, a recent Kaiser Family Foundation poll showed most Americans think that not enough is being done to curtail opioid abuse. Zika is threatening the country as well, Congress taking up the President's request for more than a billion dollars for research and preparedness as mosquito season draws near. Meanwhile, in advance of the approach of zika, researchers have devised an inexpensive and rapid test for the precedence of the virus. A consortium of researchers unveiled a simple paper based test that when heated and exposed to blood samples, can reveal the presence of zika within a couple of hours. The test is said to cost less than a dollar. Meanwhile, designers are thinking ahead to the upcoming summer Olympics in Brazil, ground zero for zika, South Korea's team is wearing uniforms that come already with insect repellent in them.

And croaking down on the young who smoke California is raising the legal age to purchase tobacco from 18 to 21 the second state of the nation to do so following Hawaii. The bill increases restrictions on the sale of vaping and e-cigarettes products

as well, those exempts from the law, those serving in the military. I am Marianne O'Hare with these healthcare headlines.

(Music)

Mark Masselli: We are speaking today with Dan Munro leading health industry analyst and author of the newly released Casino Healthcare: The Health of a Nation: America's Biggest Gamble which explores the inherent dysfunction of the pricing in America's \$3.4 trillion healthcare system. Mr. Munro was a prolific writer on technology and health innovation leading contributor covering health industry issues for Forbes, TEDMED, Health Standards and numerous other publications. Dan graduated from the International School of Brussels before completing the degree in Computer Science and Communications and Journalism at the University of Redlands. Dan, welcome to Conversations on Healthcare.

Dan Munro: Thanks for having me.

Mark Masselli: We have watched this incredible transformation of the healthcare system unfold in the past few years and it's an unfortunate reality that in spite of the reform initiatives now in play the chances of seeing a rational pricing system healthcare seem to be illusive. And I wonder if you could talk to our listeners about the conundrum of healthcare pricing in America and how we got here.

Dan Munro: Absolutely. Our system is really the result of the series of legislative patches through the years at America's entrance to World War II and largely for other economic reasons, we tied healthcare benefits to employment and we never changed it. Today healthcare benefits are provided through an employer for almost 40% of all Americans and tax break to employers for handling this parental function is estimated at about \$500 billion annually. So there is an enormous financial incentive to keep this original sin, Kennedy then argued for universal health coverage but after his assassination it got paired back to just Medicare Medicaid. It took another 20 years before COBRA and EMTALA were added which were more patches to fix other glaring flaws. Clinton added the Medical Leave Act in 1993 and then finally ObamaCare was passed in 2010.

So the legislative process tends to take about 20 to 25 years and even then it tends to address glaring flaws around the edges, not root causes. Opaque pricing is one of the hallmarks of the system that's been optimized for revenue and profits, when we finally do see pricing typically after a healthcare exempt [PH] it's often shocking and unbelievable. And then we lead to the conclusion that the whole system must be

broken, but it's really not, it's really working as it was designed, the healthcare engine we have is designed to maximize volume and throughput which translates directly to revenue so it's like an engine that goes very fast but only gets two miles per the gallon. And the book is really a full-throated argument in favor of a redesign that's optimized for safety, quality and equality, not simply revenue and profits.

Margaret Flinter: Well Dan it reminds me of a guest that we had on a while back, Steven Brill who gained quite a bit of attention for his work [Inaudible 00:07:55] if you will on the rules governing health industry pricing. So we have had the Affordable Care Act now for five years, we have seen new measures put in place to promote more transparency at least on the insurance side of things but prices just seem to continue to rise and really pretty dramatically looking at pharmaceutical prices, so tell us more about what's contributing to the ever increasing healthcare prices?

Dan Munro: The fact is like Brill, every journalist I know has attacked this issue head-on and it's changed nothing. I think to fully understand the resistance to changing how we price healthcare it helps to recall the quote that was delivered by venture capitalist, Vinod Khosla, he famously quoted Florida Governor, Rick Scott, who said, "How many businesses do you know that want to cut their revenue in half? That's why the healthcare system won't reform the healthcare system". The Affordable Care Act changed aspects of health insurance coverage but it didn't really tackle cost. Cost is far more systemic to other components that make up pricing like medical education and how we minimize the value of primary care in favor of expensive specialty care.

Atul Gawande highlighted this, when he pointed out that the system we have fosters and promotes cowboys even though we know that the best healthcare is team based care like pit crews which was the title of his article on the New Yorker, Cowboys and Pit Crews. We have to change this but then we have to consciously decide against the system that's been optimized for revenue and profits but as we have seen by the legislative cycles the progress is slow.

Mark Masselli: You know Dan you spent a quite lot of times analyzing the Obama Administration's attempt to put safeguards in place so the health consumers aren't being taken advantage of in the wake of the passage of the healthcare law. And all Americans need to carry health insurance but on the other hand seems that consumers are paying a lot more, talk to us about the intent of those reforms, what's working out for consumers and what isn't.

Dan Munro: The Affordable Care Act ObamaCare really tackles four problems around health insurance coverage but not price. First of all was the one mandating health

insurance coverage for everyone, the other was guarantee issue which officially ended the whole business of preexisting health conditions that was a glaring flaw that should never have existed. The other was community rating which is the idea of the same price for everyone regardless of health status, and then of course the fourth component was Medicaid expansion which was then pared [PH] back by the Supreme Court. There were no changes however to big ticket healthcare services and how those were actually priced. Even today with ACOs, bundled payments and reference pricing all of which are really experimental you can group the billing codes in new and different ways but that doesn't change the price at the coding level.

Hospital sees four distinct buckets of revenue: the uninsured, Medicaid, Medicare and then commercial insurance. If three of those four buckets are negative margin, and you are largely free to adjust the fourth category – commercial payers, that's exactly what you do. We are likely to see double digit rate increases for 2017 largely because of this negative effect of negative margins.

Margaret Flinter: So another recent report that generates a lot of news and concern and with very good reason is that of medical errors. We go back to 1999 and Dr. Berwick's Institute of Medicine report To Err is Human is you know may be the beginning of this understanding, how do you think this continues to go unabated and what can be done about it?

Dan Munro: Yeah and the numbers are really eye-popping. So it's as if the largest commercial airplane ever made, the Airbus A380 crashed daily with no survivors. If that happened in the world of aviation, the entire fleet would be grounded after the second day. In fact there is an entire range of cost from medical errors and litigation to data breaches and pharmaceutical fines that are simply passed on to all of us in the form of higher pricing and higher premiums.

Cyber security is another great example, Anthem has a largest single data breach in healthcare just last year but there was no real penalty to the company. Between 2009 and 2015 pharmaceutical companies paid the Department of Justice about \$15 billion dealing with the safety of human life. These behaviors should be considered criminal but no one ever goes to jail and if you can simply burry the cost of the bad behavior or penalty what's the incentive to change, you simply pass on the cost and that's what we have seen and continue to see.

Mark Masselli: We are speaking today with Dan Munro leading health industry analyst and author of the newly released Casino Healthcare: The Health of a Nation: America's Biggest Gamble. We had Dr. Patrick Conway who is the Chief Medical Officer at CMS

on the show talking about the push for value versus volume. They have a new set of rules for Medicare reimbursement so called MACRA rules, do you believe these new rules will ultimately have the intended effects on improving quality while serving to rein in healthcare cost.

Dan Munro: So I have to go back to one of the key quotes that finally prompted me to write Casino Healthcare by the author Michael Lewis. He was referring to high speed trading on Wall Street. Here's what he said, "If it's so complicated that you can't understand it, then you can't question it." And unfortunately MACRA is yet another great example of this principle repeating itself perhaps the most damning was from John Halamka who is both a physician and very well respected healthcare technology leader, the 962 pages of MACRA are so overwhelmingly complex that no mere human will be able to understand them. There is a practice inclination for 30 years I can honestly say that it's time to leave the profession if we stay on the current trajectory. I think it accurately reflects our complete unwillingness to address healthcare cost. Even if MACRA is adapted it's unlikely to have much impact on how commercial healthcare is priced and sold.

Margaret Flinter: Well, hope is there for mere mortal is among us who is trying to understand all this because the American consumer in this equation is sort of set up in a perfect David and Goliath but how can the typical American consumer of healthcare which is just about everybody rise above the complexities of these pricing systems?

Dan Munro: It is a real challenge because consumers really have no chance and any kind of control of this eight-headed hydra other than you know clearly doing everything they possibly can to stay out of the system all together. And so that means being informed and working diligently on sort of their own contribution to their own health but given the enormous and growing cost, the system is also perpetuating a kind of perverse logic very directly. As cost escalate, more people stay away from even basic primary care which is the exact reverse of what we need, we need low acuity preventative care to be easy and cheap so that we can avoid expensive healthcare down the road. The trouble with paying for prevention of course is that when it's successful it's lost revenue like the gambler in the casino we are now completely addicted to this revenue.

Mark Masselli: Well there is another kind of casino game going on in healthcare that many are looking to as a potential game changer for what's ailing the system and that's the advances of new health technologies genomics and the other –omics with it telemedicine, wearables and new diagnostics we are also seeing the downside of that where billions have been invested sort of in the wrong big idea where Theranos comes

to mind, where do you see the best potential for not only making healthcare more responsive and efficient and but more cost-effective as well?

Dan Munro: Yeah. So this is loosely what I see is the casino of venture capitalism here the story is equally challenging because of the economics of the healthcare reimbursement then their reluctance is palpable for no other reason then there is simply way too much money to be made outside of healthcare so why take the risk? This is most visible through the lens of what are called the unicorns early stage ventures with the valuation of a billon dollars are more. Out of 145 companies that qualify as unicorns only 10, less than 10% are in healthcare industry and only 2 of the 10 are outside of the category of bio-life science. The general rule among VCs is that healthcare is really hard and returns take for ever if they happen at all, given our three often four party payment system the idea that there is an Uber for Healthcare is largely a fantasy. There isn't as much of failure, it did achieve rare FDA approval for one test as it is a reflection of just how hard the science really is and VC is tend to have a much shorter timeframe for returns on the bets they do make.

Margaret Flinter: Dan I was moved by a recent article that you wrote in Forbes that marked the 50 years since Dr. Martin Luther King memento that evolve the forms of inequality injustice in health is the most shocking inhumane. And you noted that health inequity is still very much with us today that it could take another 50 years before we see an end to that inequity. So as we ponder, as you ponder, how we get our system past this?

Dan Munro: Yeah. Unfortunately the inequality that Martin Luther King referenced is very much alive and with us today. There are millions that are uninsured and million more who are underinsured. One of the saddest statistics is actually the kids. Today there are about four and a half million American kids without health insurance coverage at all. Sure, we will pick up the tab if they need emergency care but we all pay for that and the real message that we are sending to the next generation is really troubling which is that healthcare isn't a priority for the health of an entire country. So history has shown that healthcare legislation takes about 20 to 25 years for each big iteration which means the next opportunity for significant change isn't really until after 2020, a full 10 years after ObamaCare. Ultimately, we will get to universal health coverage, not just because it's the right thing to do, but because it's in our economic and societal best interest, while I don't think it will take another 50 years, I do think it could be another 15 to 20. And there is another quote I used towards the end of the book, and it's often attributed to Winston Churchill, "Americans can always be counted on to do the right thing after they have tried everything else." And that's where we are, we are still trying everything else.

Mark Masselli: We have been speaking today with Dan Munro leading health industry analyst and author of the newly released Casino Healthcare: The Health of a Nation: America's Biggest Gamble. You can learn more about his work by going to danmunro.com or follow him on Twitter @danmunro. Dan, thank you so much for joining us on Conversations today.

Dan Munro: Thanks for having me, enjoyed it.

(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 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: Hillary Clinton said at a town hall meeting that "you can't do any research about marijuana because it's a Schedule I drug." That's false, Schedule I classification makes it difficult to conduct research on a substance but not impossible. Clinton was talking about her support for research on medical uses of marijuana. According to the US Drug Enforcement Administration, drugs and other substances are classified into five categories. Schedule I drugs are the most dangerous class of drugs the DEA says and have no currently accepted medical use and a high potential for abuse. They include heroin, LSD, marijuana and ecstasy. The DEA classifies cocaine, methamphetamine, OxyContin and Adderall as Schedule II drugs.

Researchers must obtain a license from the DEA to study Schedule I drugs another hurdle is obtaining the marijuana which can only come from the National Institute on Drug Abuse which has contracts with the University of Mississippi to grow marijuana for research. Donald Abrams, a marijuana researcher at the University of California, San Francisco, told us another problem is obtaining funding. The National Institute on Drug Abuse can't study marijuana for potential medical benefit, it can only study it as a substance of abuse so funding must come from another source. Abrams is currently funded by the National Heart, Blood and Lung Institute to study the benefits of marijuana on sickle cell anemia patients. Reclassifying marijuana would make it easier to conduct research on the potential medical benefits but Clinton's claim that, you can't do any research about marijuana, is wrong. 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 Healthcare.

(Music)

Mark Masselli: Each week Conversations highlights a bright idea about how to make wellness a part of our communities and everyday lives. Dr. Timothy Amukele has been practicing pathologist and professor at Johns Hopkins School of Medicine for years and for much of that time the African native has been interested in how to tackle poor management of non-communicable diseases in Sub-Saharan Africa.

Dr. Timothy Amukele: The fastest growing disease class in Sub-Saharan Africa is non-communicable disease things like diabetes, hypertensions.

Mark Masselli: The greatest challenge in disease diagnosis and management is the lack of access to clinics. One of the students made a bold suggestion, why not develop a drone system that could transport diagnostic tests from clinics directly to patients leaving in these remote areas?

Dr. Timothy Amukele: I think the biggest impact will actually be allowing people who need constant laboratory support.

Mark Masselli: Dr. Amukele worked with engineers to develop not only a drone vehicle that could go long distances but one that would protect the integrity of blood samples needed for diagnostics.

Dr. Timothy Amukele: Medicines [Inaudible 00:23:29] for transport but biological samples are, they are really quite fragile and they are time critical.

Mark Masselli: Dr. Amukele sees limitless applications for drone technology in these remote areas.

Dr. Timothy Amukele: If you take a country like Uganda or Malawi you know and you have islands in the middle of the lake, that's an obvious place where transportation is hard and we can have drone networks there. Liberia, during the Ebola epidemic moving samples around was a big part of the problems and just setting up drone transportation networks in places like that I think will be a huge boon for health.

Mark Masselli: He expects to have agreement in several countries testing a system in the field.

Dr. Timothy Amukele: Especially the workers on the ground you know they are the ones who have to go back and tell people, oh the blood sample we got from you is useless now because it took too long, and they are looking to solution and they are really open and working in quite a few countries get to the point where we can start providing the service to people.

Mark Masselli: A dedicated relatively inexpensive drone system, designed to eliminate the barrier of diagnostic testing, having a positive impact on their overall health, now that's a bright idea.

(Music)

Margaret Flinter: This is Conversations on Healthcare, I am Margaret Flinter.

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

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