Chris Trimble, author of How Physicians Can Fix Health Care One Innovation at a Time

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

Margaret Flinter: And I'm Margaret Flinter.

Mark Masselli: Well Margaret, we are in the season of giving thanks and it seems with so much going on in the world, we have much to be truly thankful for here in our country.

Margaret Flinter: Well we do indeed Mark, but our hearts go out to the victims of the Paris attacks as well as all of those refugees in search of a place to call home. I think it adds a special [inaudible 0:28] American families gather safely around their holiday tables during this holiday season to think about so many that don't have a home.

Mark Masselli: Absolutely, and meanwhile the Surgeon General in The Department of Health and Human Services want to remind folks that Thanksgiving is also National Family History Day, a great time to collect the families' health history.

Margaret Flinter: Well you know a recent survey show that while most Americans believe it's important to know your family history, only about a third of Americans actually do, and for many families it's just never occurred to them to ask about past generations of loved ones and what health issues might have befallen them.

Mark Masselli: There is actually a guide you can download from the Department of Health and Human Services website. Just go to a familyhistory.hhs.org, a simple template is provided to guide families through the process of collecting that family health history and making it available to future generation, so pass the cranberries and also [inaudible 1:24].

Margaret Flinter: If you go a long way in helping families and especially the younger generations understand what health risks they might face down the line and also how to make better use of preventive measures and screenings to reduce risk and improve their own health in future.

Mark Masselli: The future of healthcare is on the mind of our guest today, Chris Trimble is an expert in organizational innovation; he has since turned his attention to innovation in the healthcare industry.

Margaret Flinter: Chris will be talking about his most recent book, How Physicians Can Fix Healthcare – One Innovation at a Time.

Mark Masselli: Lori Robertson stops by, the managing editor of FactCheck.org, is always on the hunt for misstatements spoken about health policy in the public domain.

Margaret Flinter: And 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 Chris Trimble 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'm Marianne O'Hare with these healthcare headlines. Men's health and cancer screenings, prostate screenings are down and so is cancer detection. The US Preventive Services Task Force recommended in 2012 and regular screening for heightened PSA levels in men, saying at the time the risks outweighed the benefits of the blood test. The theory behind the recommendation is that prostate cancers grow very slowly and might never harm the patient, but all are treated and often with rigorous and life-altering treatments, exposing too many men they say to radiation and incontinence and other side effects.

Experts in urology fear that pendulum is swung too far in the wrong direction and not enough screenings are being ordered now. There has been 7% drop in just a couple of years in the numbers of men over 50 being given those routine screenings and diagnoses are down by tens of thousands of patients. With actor Charlie Sheen's recent disclosure that he was HIV positive, it has put the disease on the front burner as we approach World AIDS Day. While HIV has become a disease of medical management, there is far less fear in certain populations and there are still some 50,000 new diagnoses each year, especially among young men of color.

Meanwhile HIV positive folks who purchase the most popular silver plans on the federal insurance marketplaces are finding it harder to access the drugs required to hold the disease in check. In 31 states and District of Columbia out-of-pocket cost for purchasing these drugs can run into the thousands. Meanwhile the cost of drugs is increasingly driving the cost of overall health in this country. There is also a global impact. A survey shows by the year 2020, the world will spend a trillion and a half dollars on prescription drugs. In 2015, the number was just over a trillion dollars.

Texas has been hard at work trying to shut down Planned Parenthood; the only access to family planning and basic health services for hundreds of thousands of mostly poor women and that limited access is having an ancillary effect. An estimated 240,000

Texas women have resorted to attempting self-induced abortions. Health officials warn this is a crisis in the making. I am Marianne O'Hare with these healthcare headlines.

(Music)

Mark Masselli: We are speaking today with Chris Trimble, author of How Physicians Can Fix Healthcare – One Innovation at a Time. Mr. Trimble is an expert on innovation within established organizations with a more recent focus on healthcare industry. He is a professor in the Masters in Healthcare Delivery Science Program at Dartmouth's Tuck School of Business and he has advised a number of Fortune 100 companies on the innovation strategies including Microsoft, AT&T, and GE. A prolific writer, Mr. Trimble also co-wrote Beyond the Idea: How to Execute Innovation in any Organization as well as The McKinsey Award winning Stop the Innovation Wars in the Harvard Business Review. He served as a Nuclear Submarine Officer in the US Navy, earned his Bachelors of Science and Mechanical Engineering at the University of Virginia and his MBA at the Tuck School of Business at Dartmouth. Mr. Trimble welcome to Conversations on Healthcare.

Chris Trimble: Thanks very much Mark. It's great to be here.

Mark Masselli: Love the line in the book about your ability to walk through a submarine blindfolded and be able to just sort of do anything. Now you have been really engaged in innovation; you know it's a challenge for any organization; how do you innovate, continue to serve your customer base, and keep their businesses moving forward and you have been looking also at large organizations as we just said GE, Microsoft, and eBay, but now you have starting to make the shift over to healthcare with the Affordable Care Act and just changes in the business climate going through enormous policy and care delivery side change, so a great time to bring skill sets around the innovation. Can you describe for our listeners your focus on healthcare and how your innovation principles were adapted to fit to the unique challenges in the industry?

Chris Trimble: I sure can Mark, you know you described what I have been doing very well. I have been studying for many, many years why it's so hard for organizations to innovate, and it's because there is so much conflict between what already exists on-going operations and innovation and that much is the same in the industry as it is in healthcare. I have been looking for an opportunity. I had to really dig my teeth into an issue of social significance where innovation was going to play a big role and so healthcare just called out to me that way as the perfect chance.

So I would say when I first came into it, I probably I underestimated just how complicated and unusual how peculiar an industry it is and so it did take some time and some effort to figure out how to customize what I had developed for any industry to the

specific challenges of healthcare, but I just found out I loved the challenge of getting to know a profession I have long admired, the medical profession, and learned how to work with and communicate with physicians in particular and hopefully provide some helpful guide post towards making innovation happen.

Margaret Flinter: Well Chris you know in your book you made a great observation that when penicillin was discovered it delivered a double win for the healthcare industry. We had not only a vastly improved chance of survival of infection so much better health outcomes, but you have made the observation now that the 21st century double win isn't going to come from a pill or a device but will come from breakthroughs in care delivery innovation maybe through what we call implementation science here in our organization. You have also said you see reverse innovation playing a great role. Tell us what you mean by that and maybe give us some examples; what are these double wins of the 21st century that we are likely to see?

Chris Trimble: There may still be double wins where we get both an increase in outcomes and a decrease in cost from the same medical innovation, but it's pretty clear that if you look at innovation or biosciences driven innovation in aggregate, the curve is flattened out, which is to say we are spending a lot more and the gains are getting ever more marginal; like at the most everyone can think of at least one recently released pharmaceutical that is only marginally better than its predecessor and yet costs far more. These double wins in the biosciences are very rare, and we shouldn't feel badly about that. Every industry you will ever look at, this is well documented. The innovation trajectories tend to get flatter over time and what that means is we have to look in an entirely new area for double wins and that new area is innovation in healthcare delivery. This is a pretty unique opportunity in healthcare. There are opportunities for double wins all over the country and in every medical condition and yet we have been sitting on these for decades in part because we are very understandably obsessed with advances in the biosciences.

But also because of fee for service medicines, fee for service medicine stands in the way the majority of the time of innovations in healthcare delivery and so we have been missing these opportunities for a long, long time and there is no greater reason to feel optimistic about the future of healthcare in the steady and even accelerating transition we are making to accountable care and a value based payment. This will open the door for innovation in healthcare delivery as never before.

The only question is would we recognize it as innovation. Very often these innovations are based on common sense principles that we talk about a lot, like coordination of care or better prevention for populations that are at high risk, and they may not represent intellectual breakthroughs but they do deliver that dramatic double win, so to finish your

question you asked about reverse innovation and this refers to innovation in the developing world and the increasing prevalence of innovations that are adopted first in the developing world, and we are seeing that in all industries I think sort of underlying forces very easy to grasp. Here in the United States, we need to find ways to deliver higher quality care at lower cost why wouldn't we look for inspiration to nations around the world that have struggled with minimal resources for decades.

Mark Masselli: Chris, I really liked your mountain climbing analogy when referring to innovation of any kind and you said that amateur innovators cheer when they get to the top of the mountain and when the experienced innovator knows to wait until they have gotten back down. Talk to our listeners about the cycle of organizational innovation and where the pitfalls are generally lurking in the process of not only innovation but implementation of these new ideas.

Chris Trimble: Innovation is like that and the summit moment is that moment when you come up with the new idea, and unfortunately when organizations get excited about innovation, they tend to imagine that if they can just come up with that breakthrough new idea, the rest will be a snap. More often than not that is just wrong. The idea is the easy part and that's particularly true for innovation in healthcare delivery because we are talking about ideas that have been around for a long time like standardization of care processes or coordination of care. These are not complicated ideas and at least they are just ideas that we have sat on.

Margaret Flinter: Actually the pace of innovation has been accelerating but the purpose of your book is that clinicians innovating on the front lines of care delivery that they all hold a key or part of the key to meaningfully transforming healthcare. Tell us how clinicians should be thinking about fostering innovation. Tell us why appointing a designated team is an essential first step.

Chris Trimble: One of the themes of the book is that there are a whole lot of even near at hand innovations that we have not capitalized on that are lower risk, have a higher probability of payoff; wouldn't be a shame if we have got so absorbed and the possibilities of new technology that we overlooked the lower hanging fruit. You are absolutely right, there is a role for all in innovation. It is just that leadership is a particularly essential element. Many organizations in healthcare for many years have been investing in continuous improvement, but there is a physical limit to how far most continuous improvement or quality improvement programs can go because they are designed to squeeze innovation into little pieces of slack time in the organization; it's everybody's part-time job. Something really important happens when you commission a dedicated full time team for a single innovation initiative and that's the other part that's a little bit more subtle but extremely important is that suddenly you have a whole new

degree of flexibility and that is you can rethink from scratch what everybody's job is and team redesign is at the very core of innovation in healthcare delivery.

Mark Masselli: We are speaking today with Chris Trimble, author of How Physicians Can Fix Healthcare. He is a professor in the Master's in Healthcare Delivery Science Program at Dartmouth's Tuck School of Business. Chris you know we have been very engaged in these clinical Microsystems, really something that came out of Dartmouth but it's all about a partnership within the organization and that's I think you said is where the challenge lies. Talk about this larger partnership that you envision.

Chris Trimble: To talk about the power of a dedicated team is indeed to oversimplify. That is a critical step to take but these teams never work in isolation and so what you end up with is what I describe as a partnership between a dedicated team and a shared staff and while the dedicated team has at least in theory infinite flexibility, a shared staff has almost no flexibility. They are already locked in to their existing care models and care processes and already have extremely busy schedules so treating the shared staff well is something of an art. You have to make it as easy as possible for the shared staff to contribute to the innovation, and of course you want to share credit with the shared staff at every opportunity you get and make it feel like the victory is theirs as well as it is that of a dedicated team.

Margaret Flinter: Well Chris, you have also said that there – in your research in estimation – might really only be a couple of hundreds systems across the country that are really ahead of the curve in implementing breakthrough innovation. Maybe tell us about a few of those systems across the country that you think are really ahead of the curve in implementing breakthrough innovations and maybe a few words about what those innovations are that so impress you.

Chris Trimble: Sure. So you are absolutely right in saying that the commissioning of small full-time teams has not been the norm in healthcare. Probably, the most important unexpected step that I am pushing for and asking senior leaders in health systems to make is to commission those teams far more often than they are today. I think that what you have in healthcare is a knee jerk reaction to doing so that is really the residue of our fee for service mindset.

Once we get past that what we are going to see is very modest size risks with the high probability of return and in fact these risks are paltry when compared to other risks that healthcare leaders are quite accustomed to, like building new buildings or new wings for the hospital or even merging with a rival across town. I would say there is not a hundred systems across the country that are doing this well; I would say there is none. There are hundred or a couple of hundred examples of projects that have happened

one way or another because of a single committed senior leader that wanted to see it happen or because the project was grant funded in some way, had some other special source of funding.

One that I talk about frequently is from Salt Lake City and Primary Children's Hospital in particular which is run jointly by Intermountain Healthcare and the University of Utah. Here the population, the patient population of interest is children with complex medical conditions and yet they are overwhelmed and very often it's the case that they are given conflicting advice from multiple caregivers that are working with them, so the innovation leader in this case was Dr. Nancy Murphy who started recognizing the ways that the system fell short for these families as early as her residency, and she had the chance to build a small clinic. It was a dedicated team, a small full time team of four people and because it was a dedicated team they had the flexibility to reinvent what they do at work everyday and what they created was a clinic in which every appointment is quite lengthy 60 minutes, even 90 minutes and during which time you might see, in fact you are likely to see all four members of Murphy's team up to four families might be in the clinic at one time, at the end of the 60 or 90 minute session they would all huddle and share insights and recommendation and then go back and have one final discussion with the families.

These families are, they have a lot to think about and they are often dealing with trauma and so more than a third of the clinic's time was left free of appointments to enable ample bandwidth for phone calls, for email, for follow up both with the families and the others that were involved in the care. The result, well patients and their families are far more satisfied, and despite the extra that was spent in this clinic, costs overall to the system were down by well over 10%.

So I would tell you, I share this story a lot and very often the reaction is a bit understated and there was accurate recognition that there was no intellectual breakthrough here and what this was, was simply more time for care planning and care coordination and that is exactly right in fact that's the point we can get dramatic double wins through the proper application of common sense ideas that have been around for a long time. Anybody that can deliver a dramatic double win is a hero in my book.

Mark Masselli: And some seem to hold promise, wide waterfront of devices out there, self tracking, telemedicine, remote monitoring, but I am wondering if you could talk about how these emerging technologies may or may not accelerate the pace of care delivery innovation and what is your research telling you.

Chris Trimble: I think they will help transform healthcare; I just don't know how. I don't think anybody knows how, how important say a wearable device or some of the new cell phones apps are going to be or some of the new telemedicine technologies are going to

be and I am not going to judge whether high-tech is more important than the low-tech stuff that I am writing about. I think there is probably value to be gained across the board. I will repeat my big fear and that is we will get so carried away with our infatuation with science and technology that we will overlook the opportunities that are very near to hand.

Margaret Flinter: We have been speaking today with Chris Trimble innovation expert and author of How Physicians Can Fix Healthcare – One Innovation at a Time. You can learn more about his work by going to exec.tuck.dartmouth.edu/news or you can follow him on Twitter @trimble_chris. Chris, thank you so much for joining us on Conversations on Healthcare today.

Chris Trimble: It was a pleasure being here, thank you very much.

Mark Masselli: Right.

(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 claimed that a recent study showed white middle-aged Americans without a high school education are dying earlier than their parents and their grandparents. One of the authors of that study told us it “doesn’t” establish any of what she said. The study found an increased mortality rate among that age group since 1999, but it made no comparisons with past generation.

The study was written by two Princeton Economists Angus Deaton and Anne Case and published online November 2 by the Proceedings of the National Academy of Sciences. It found that the mortality rates for non-Hispanic whites 45 to 54 years old has increased by 34 deaths for 100,000 people from 1999 to 2013 reversing a “remarkable” long term decline in mortality rates in the United States. That increase was driven primarily by those with a high school degree or less. The mortality rates for that group during that time increased by 134 deaths per 100,000. One of the authors, Deaton, told us in an email that the study did not say anything about people without a high school education as Clinton claimed.

More important, the study didn’t make comparisons with past generations. Clinton claims that the study shows middle-aged Americans are dying earlier than their parents

and grandparents. Deaton says the study doesn't look at that question at all, and he told us that he would be surprised if her claim were true especially for grandparents given the general decline in mortality prior to 1999 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. Falling is a common experience among the elderly and that is not good news.

Drew Lakatos: Hip fractures in the elderly are enormous devastating expensive, death sentence of an injury. If you are over 65 and you have fallen and broken your hip, 25% of them will die within 12 months. Another 25% will never be able to live independently and a full 75% will never regain full mobility.

Mark Masselli: That statistics got former Airbag executive Drew Lakatos thinking what if you could apply the technology used in airbags to create wearable devices that protect a person from the impact of falling.

Drew Lakatos: So our government has spent billions in about two decades on fall prevention programs for the elderly. What I am suggesting is we make that same strategic shift that the auto industry did and we begin focusing on intelligent protection of our elderly.

Mark Masselli: So they did their research and found a combination of accelerometers and other sensors on the band worn around the waist could deploy within 6 milliseconds of sensing an imminent fall, significantly reducing the blow to the joint.

Drew Lakatos: With the right technology, we can ensure that these people that meet that inevitable, immovable object which is the floor can not only survive that accident they can walk away. With this type of technology, we can protect against concussions; we can now protect Coumadin patients. We can protect our military soldiers from IEDs.

Mark Masselli: A simple retooling of airbag technology leading to better health outcomes, lower health cost, and better quality of life; now that's a bright idea.

(Music)

Chris Trimble, author of How Physicians Can Fix Health Care One Innovation at a Time

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.