

Evolution or Revolution? The Rationale for Healthcare from Scratch

Guest: James Maskell

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James: Hello! And welcome to The Evolution of Medicine™ Summit. I'm your host, James Maskell. And I'm bringing you today a special presentation, which really outlines the rationale behind our second summit and particularly the topic, which is Healthcare from Scratch.

So what I wanted to do today was first of all to give you an overview of who the evolution is, what we do, to talk a little bit about how medicine evolving and then talk about the rationale for this year's summit of Healthcare from Scratch, give you a little bit of what you can expect. And at the end, we're going to tell you a little bit about what we're launching at this summit.

And what we're launching will show you hopefully that we're not just talking about Healthcare from Scratch. We're actually building healthcare from scratch. And so please make sure to listen in right to the end because what we're going to be announcing is going to be very interesting to you, whether you're a doctor, a health professional, a patient, or anyone interested in the evolution of medicine. I think you'll get a lot out of it.

So where do we start? Where did this whole thing start? We started a community in New York for doctors and practitioners doing integrative and functional medicine at the beginning of 2014 called the Functional Forum. By our third episode in April 2014, we were live streaming it. And by the end of last year, it had quickly grown to be the biggest integrative conference in the world really by virtue of the fact that it's free. It's available on our YouTube channel. And it streams live to web.

And we now have 150 meetup groups across the country and across the world actually, from San Francisco to Manila in the Philippines where groups of practitioners get together to watch the monthly show on the first Monday of the month.

And the tag line for the Functional Forum is "Accelerating the Evolution of Medicine." And so last year we started to put together this summit called The Evolution of Medicine™ Summit to really document and look at all the ways in which medicine was evolving.

Now, when I think of evolution, I think of something adapting to its environment. And medicine is no different. You know, the environment in which medicine was created and the environment in which it is now is very different. And medicine is trying to adapt from one to the other. And so we looked at those leaders who were leading the charge in evolving medicine.

And we looked at really the evolution of the medical paradigm and looked a lot at functional medicine as a more effective operating system for dealing with chronic disease. There was also a lot in last year's summit about evolutionary concepts within medicine. So we had a whole day dedicated to the microbiome. We had a whole practitioner day dedicated to the gut health and its interaction with brain health, the gut-brain axis, which is certainly good to understand in terms of the way that we've evolved with microbes.

We had a whole day dedicated to evolutionary concepts within nutrition, like Paleo. And the Paleo movement has really been based on what we evolved to eat. And then we also looked at technology. How is technology going to come along to be able to help to accelerate this evolution of medicine?

And so last year's summit was a great success. We had more than 50,000 people sign up. And it really formed the basis of what we've been able to do in the last year, which is to grow the Functional Forum and grow the intention and trust of the functional medicine community around the world.

But over this year, I really got thinking about why medical evolution is so slow. One thing that I hear from practitioners and people in medicine all the time is a frustration on how slow medicine is evolving. And it really needs to evolve much more quickly.

There's statistics out there that show that it takes on average about seventeen years for new ideas and new research to make it into everyday clinical practice. But I would assert that we really don't have seventeen years for epigenetics and the microbiome and these new understandings to make it into medicine because if you look at some other statistics you'll see that Dr. Stephanie Seneff, who's a researcher at MIT, has predicted that if autism continues to rise at the rate that it's rising, we'll have one in two children on the autism spectrum by 2025. That's only ten years away. So we need to think about the way that we're doing things very differently.

And so I really got to thinking, why is medicine evolving so slowly? Why is medicine getting to a point where it's not evolving quickly enough to deal with the modern epidemics of chronic disease? And that got me really thinking about Healthcare from Scratch. And the reason why is because of this fundamental assertion is that the medicine that we have that was created around acute disease is fundamentally opposite than the medicine that we need for chronic disease. And it's this opposite that is stopping medicine from evolving very quickly.

You know, you think of evolution, you think of gradual change over a period of time. But we're not talking about gradual change here. We're talking in a lot of cases in terms of opposites. Not just 20% difference, and it's going to evolve across over a few years. We're talking about fundamental opposites. And what I wanted to do today was just to share some of these opposites so hopefully you can understand a little bit of my thinking. And that's what's driven this whole conference this year on Healthcare from Scratch.

So let's go through some of these. I've come up with eight of these areas where

I feel like it's obvious to see that there is a vast difference, an opposite, in between what we have in the medical system that was created in response to acute disease and the one that is necessary to deal with the modern epidemics of chronic disease.

And if you're listening to this, if you listened to our forum last year or summit, or if you just watched the intro video to this, you'll see that this chronic disease is obviously the most pressing problem. We have over 100,000,000 with chronic and autoimmune diseases. We have one in two children with some sort of chronic illness. And these numbers are continuing to rise. And so we really need to look at this differently.

So let's give the first example. And hopefully this will set up the rest of the conversation. So medicine was created to deal with acute disease. And when I'm talking about medicine, I'm not talking about what some people call traditional medicine which would be Chinese medicine, Ayurveda, ancient American-Indian medicine. I'm talking about modern medicine.

And so a big moment in that was the Flexner report in 1912 and then the subsequent development of the medical schools. Around there was the founding of penicillin, which really helped to accelerate that. But that medicine was really created around acute disease.

And it made perfect sense for it to be created around acute disease for so many reasons. One, those were the diseases of the time. Acute infections, trauma, these were the diseases that needed to be dealt with so that people could live a long and healthy lives.

And so what was the system that we created? One of the fundamentals was we created a profoundly reactive medical system. So in order for anything to happen, an event would take place. And then the medicine system would kick in, would react. And that worked absolutely perfectly if you were dealing with an acute infection or trauma because there's no need for medicine before

anything happens. But once it does, medicine needs to kick into gear. And now the modern version of that is the ICD9 code where everything's coded in the medical system based on a diagnosis. That's the first thing that's created.

But if we look at chronic disease, and I like to use in this example something like Alzheimer's because it really shows. And Alzheimer's is a massive issue. It's very personal to me. My grandmother, the only grandparent that I knew, died from Alzheimer's. And it's particularly tricky because it takes about three full-time careers to take care of one person with Alzheimer's. And so the cost of this disease are huge.

Now, if we look at the mainstream literature for Alzheimer's that's been coming up in the few years, there is slightly more fringe literature. But if we look at the mainstream literature, it will say that the new understanding of Alzheimer's in that the causative factor that starts the cascade that ends up with Alzheimer's can start twenty-five years before any symptoms occur.

And so you can see for something like Alzheimer's that we will never have a truly successful system at dealing with chronic disease if it's purely reactionary because the reactions happen twenty-five years too late. The symptoms arrive. There's nothing to react to in years zero to twenty-five.

Once year twenty-five comes across and you've also already got the symptoms then you're already too far behind. And it's very hard to reverse it or to stop it in that case or to cure it, if you want to use that word. And so there's a fundamental issue here where we have a reactive system, and we need to create a proactive system.

And here's exactly where the rubber hits the road is that what I see is that because these changes are so massive, the cost of retooling the whole system from a reactive to a proactive system is vast. Not just the physical spaces and what have to be developed, but the training of all the doctors. They've been trained all the way along to do differential diagnoses, to look at areas where

they need to find a symptom and then deal with it. There's a series of, a checklist of things that will happen once you have a diagnosis. But until you have a diagnosis, there's nothing really in the medical system that can be done for that. And so we're dealing from, moving from, a reactive system to a proactive system. And that's just the first example.

The second example I would give would be a movement from reductionism to holism. Again, it made very much sense in the old medical system to really focus on very specific parts of the body. And that's why we have an endocrinologist and a gastroenterologist and a rheumatologist. And they don't really speak the same language. They're all doctors, but they all focus on a particular part of the body.

And it made total sense. Specialization and trade, I understand it from an economic point of view and obviously getting the best care for specific issues. However, now what we're seeing is through the mainstream literature is we're seeing that what is really happening with chronic disease is that the diseases are multi-systemic.

So we have a situation where diseases are being caused in one system, and then the symptoms are being seen in another system. Or the disease is a function of the dysfunction of the communication between systems. And so last year, as an example, on our Practitioner Education Day, we had a whole day dedicated to the gut-brain axis. And we had the evolution of psychiatry and neurology and immunity and autoimmunity and endocrinology because all of these are fundamentally affected by the gut-brain axis, the gut-brain-skin-immune axis, it now looks like.

So what we need now is actually a degree of holism. And "holism" and "holistic" is a word that has been sort of bastardized, I would say, over time, by the fact that if you say the word "holistic," a lot of things will jump into people's mind before an understanding of like the synergy of systems. But if you go back to the original definition from Jan Smuts, he calls holism "the

tendency in nature to form wholes greater than the sum of the parts through creative evolution.”

And I love those last three words there, "through creative evolution." And look no further for creative evolution than the microbiome and the gut. And look at how we evolved with microbes and how we need them and they need us. And they're completely inseparable. And we can't live without them. They can't live without us. And so there's a great example of creative evolution, creating this amazing gastrointestinal system that keeps us all alive.

So what we need now is a movement from subspecialists where we have really deep specialists into the return of the generalist. We need people who understand the systems and how they interact with each other and can treat the whole patient. And that's a movement towards wholism from reductionism. And that's another area where I see that medicine is evolving.

But it's very difficult to evolve in that direction because if all of your training has been in rheumatology and you understand the joints, why would you ever need to learn about food and the way that your gut can impact the joints? But those kind of causes are being more and more seen in the mainstream literature.

And so we need to find and to foster groups of doctors and health professionals and patients that understand that the body is connected obviously and that a lot of the leverage over the long-term is going to be in keeping the communication systems that help the different parts of the body communicate with each other, keep them functioning effectively.

So, again, it's a movement from reductionism to holism. And because of the connotations of the word "holism" even by itself, it may be stopping a number of doctors from moving in that direction and medicine evolving in that direction. So that's the second one.

The third one is last year on the Evolution of Medicine™ Summit, we had Dr. Leo Galland on the show. And he spoke. He was the creator of what's called the patient-centered diagnosis. Now, in the old medical system, in acute disease, it made absolute sense to build the whole medical system around the disease and the doctor.

The doctor was the one with the tools. He had the antibiotics. He could do the surgery. He had access to the drugs. He knew what the drugs did. And so it made absolute sense to have a doctor-centered medical system. And so we put doctors on a pedestal. And we do what they say. And we follow along. And in that way it made tons of sense in a acute situation because if you think of infections or trauma, you're not involved in your care. You're just a passive recipient of the care.

But what we need for chronic disease is exactly the opposite of that. We need the patient to be fully engaged into their healing process. We need a participatory medical system. And now this may be the biggest drain or the biggest drag of our movement from where we are to where we need to go because we built up so many systems around a doctor-centered diagnosis. We have everything come to the hospital. They get a diagnosis. There's a series of things that we do once they have that diagnosis.

But it's all about the doctor doing stuff to the patient and nothing about the patient empowering themselves or understanding their uniqueness and how specific antecedents, triggers, and mediators might have caused this specific type of dysfunction or symptom pattern in the patient and what can be done about it.

And so one of the things that's wrapped up that's making this transition across much harder is ego. We have ego on all sides where everyone wants to be right. And in this case, doctors just fundamentally haven't been trained on how to empower patients because an empowered patient is not really that useful in acute disease. But it's absolutely necessary for chronic disease. All of

the best results with reversing type II diabetes, obesity, autoimmune diseases, and those types of issues happen with an empowered patient where a patient is an active participant in their care. And, again, this is a broad opposite and so this to me is a great example of where medicine is not evolving fast enough because we're shifting from one opposite—doctor-centered medicine, disease-centered medicine, to patient-centered medicine.

So the fourth area where we're losing momentum is with regard to individual versus community. Now, medicine has all developed around the individual. That's why we have tons of laws and privacy and HIPAA and ways to keep your medical record safe because, you know what? It's embarrassing having a disease. You don't want everyone to know that you have diarrhea. You know, you want to be very personal about your information. And so that's held very keenly aware.

And it made a lot of sense for that to happen because if the doctor's delivering the medicine, you don't need anyone else involved. The doctor and the patient, and that's all that needs to be involved and that's why you see the typical medical visit is done in one room just with one patient and one doctor.

However, when we're trying to inspire behavior change, one of the most powerful areas that we need to engage that's not engaged at all in the medical system is community and the power of community. And if you are unsure about the power of this, there's a few resources that I'd like to point you towards. First of all, I'd like to give a shout out to Dan Buettner. And he wrote the book called *The Blue Zones*, which details sort of the things that blue zones have in common.

And blue zones are the places in the world where people live consistently to 100. Now they eat certain things that maybe keep them healthy. And there are other things they do—exercise and constant movement. But the biggest thing that's across all of these groups of people that live consistently past the age of 100 without the incidence of chronic disease is they have a very, very strong

community.

And so we need to find ways, if we want to be a blue zone and we want everyone to live to over 100 with lower incidences of chronic disease then we need to make sure that there's a good, solid community around them. And so this is another issue because one of the things that we've seen is when there are some models that are emerging to actually bring community into medicine.

So if you have diabetes, chances are you've been in a diabetes group where they put people together, and they help support them. And look at the models of where people sustainably lose weight: Weight Watchers or even things like Alcoholics Anonymous or Eating Anonymous, Drugs Anonymous. It's all about the community. It's all about getting a really supportive group of people around you.

And if you want to learn about the science of this, in our August Functional Forum, we had a segment from the IFM Conference this summer from Dr. George Slavich, who's a Ph.D. researcher from UCLA. And he's researching this new emerging field called social genomics. And what it shows is that your relationships and your community actually drive a greater proportion of health and a better indicator of future health or future disease or future mortality than diet, exercise, and smoking.

Community is everything. And one of the things that's holding in the way is all of these rules. And so what we've seen with practitioners who are using group visits, we had Dr. Shilpa Saxena in the summit last year who's created a group visit model for getting to the underlying cause of disease, which is one of the structures of functional medicine, one the things about functional medicine that makes it so appropriate for dealing with chronic disease.

She's got a group visit system that she's created. And one of the most powerful things that happens in that system is the power of vulnerability, people being vulnerable in front of a group of their peers. And also last year on the podcast,

we featured Dr. Leana Wen who gave an amazing talk about TEDMed about vulnerability in medicine and about how we need more of it because that's what inspires connection and trust. And that's what's leads to behavior change. And behavior change is what's necessary if you have lifestyle-driven illness.

And so we cannot keep this one-on-one. First of all, it doesn't scale, and it's very inefficient. And the scale of a group visit or group education or even this moment that I'm talking to you right now. If you're listening to this and you're in agreement with what I'm saying, you have the ability right now to share this with every single person that you know through social media, through email, through shouting in your office right now.

If this is resonating with you, you can share it with everyone. And that's the beauty of technology is that it allows the unprecedented scale. And so you can start to create that community. And so what we see is that there's a movement away from individual one-on-one to community-based systems for being able to deal with chronic disease.

Again, here's the dicotomy between acute medicine and chronic medicine. No need for community in acute. You just need the doctor and the drugs. In chronic, you need the community to keep yourself well. And that's the emerging field of social genomics. I highly recommend if you're skeptical of what I'm saying, you check out that lecture from Dr. Slavich because this is an emerging field where they can actually see the epigenetic effects, the effects of gene expression, of relationships and social community. It's absolutely amazing. So that's the fourth one.

Now the fifth one is one that I want to go to town on a little bit here because last year we had a whole day on the microbiome. As I said, we had a whole day on the gut. And this is such an emerging part of medicine. But my fifth area where I feel like we're being held back from medicine evolving quickly enough is with regard to germs.

So let's take a look at the world right now. In American right now, both all physicians, all other health professionals, and all patients have been trained over the last forty years to reach for antibiotics just in case, right? And there was no problem with that. If you took the antibiotics and it was a bacterial issue, it would clear up.

What an amazing part of modern medicine that was that gave us a lot of the gains that we received in society in terms of numbers of age that we live to and life expectancy. All came from antibiotics, nutrition, sanitation, all some of the most that was an incredible gift that was given. But we may be in the generation, a very small generation, where antibiotics actually worked.

Penicillin was invented in the 1910's and now we're in the 2015. It's basically 100 years of antibiotics that it's worked. There are very, very conclusive evidence right now that antibiotic-resistance might be the biggest issue facing mankind right now. If the antibiotics stop working, we're in big trouble because a lot of the diseases, very simple things, cuts and so forth, without access to those kind of tools or if those tools stop working, we're in big trouble.

So in acute disease, it made total sense for us to what I call microbiome minimize: kill every germ. Kill as many of them as possible. And that's going even to the next level now. We slather each other in the antimicrobial stuff. You can get it in Walmart, Purell, all of that stuff, hand sanitizer. It's everywhere because we're scared of germs.

And we've been trained to be scared of germs. It's in all the literature, all the textbook. Even the word "germ" sounds like it's something that you should be afraid of. It's onomatopoeic like that. However, the new science of the microbiome and the new science of the human microbiome project in 2011 shows us conclusively that we need germs and they need us.

And what we actually need is microbiome maximized. The epidemics of allergy and autoimmunity are maybe being driven by abuse of antibiotics. Last year

we had on the summit a number of speakers, but Moises Velasquez-Manoff who's written a number of books on this topic and has been one of the proponents for building the hygiene hypothesis and looking at that. And it was absolutely amazing to see that.

So here's exactly an opposite. We've got microbiome minimize medicine, kill the germs; and we need microbiome maximize because the germs help us with digestion, immunity, and metabolism. And without them, our immune system is not trained nearly as well by microbes. And kids are having multiple rounds of antibiotics before their first birthday. And the results are clear. We have sicker and sicker kids than ever.

So here's another area where we have a massive issue where we have trained everyone with a structure that, you know, the education, the doctors, even the hospitals and the way they're put together. Where do you go if you want to get an antibiotic-resistant infection? You go to a hospital! Because everyone's taking antibiotics there. Everything's clean. And so the only things that proliferate are the ones that are stronger than the bugs.

And now we're seeing a lot of information coming out that microbes are adapting to their environment quicker than us, and that's a big problem, too, because these germs who antibiotics have worked for for a while are now able to adapt faster than us and be resistant to those same antibiotics. So we're in a real mess with this.

And so what we need is microbiome maximized. In order to have a robust immune response to germs, we need to have a lot of germs. And we need particularly in our gut to have a broad and deep combination of microbes to keep ourselves healthy. So that's another area where we have this opposite.

The sixth area where we an opposite is what I'm calling placebo maximized medicine versus placebo minimized medicine. In what world is it where we sit here and we think that the placebo is some sort of trick that should not be

trusted and generally should be looked down upon by everyone in society? If you think about how you view the placebo effect, that's probably how you view it. But, come on! This is the most powerful healing mechanism that we have access to.

If you look at all the literature...And by the way there's information on this all the way through the literature because guess what? We're always doing placebo-controlled trials. And that's, to me, one of the reasons why I think it's even possible that we look at the placebo in a negative way because for scientists who are trying to create drugs, they have to beat the placebo. And this bloody placebo keeps coming in and getting amazing results because people can think themselves healthy.

And it was amazing at our third Functional Forum in April 2014, about three days before it came through, Seth Godin, who's one of my mentors and someone who I read his blog every day. And I think that he's just putting amazing work into the world. He put out an e-book on placebo that I thought was absolutely fascinating.

And he said the same thing. He said, "Look, if we know that this works and it even works when we know it's placebo..." which is the latest research that's coming out. Even if we know something's a placebo, it still works, we need to ethically find a way to placebo maximize, to bring as much placebo into the human experience as possible because it's valuable and particularly in healthcare.

If you watch Dr. Lissa Rankin's TED Talk, she'll talk about the fact that in the literature, 18% to 80% depending on the trial and how it's set up, get well from a placebo. So what if we spent a lot more time trying to work at how to stimulate the placebo in each person individually? And what we see from our placebo research is the relationship with the practitioner, the relationship with the provider, with someone else, that is what really drives placebo.

And so what if we could focus all our efforts on placebo maximizing and having the placebo being the first interaction or the first intervention we do with any person that we come across. It makes sense. It's free. And what if we could finely tune the placebo response of every patient so that they were able to know themselves how to placebo themselves well?

That is a very interesting conversation. And it's not being had anywhere. And, again, it's one of these things where in medicine has a system where it's a three trillion dollar industry, and every one of those big companies whether they be health care executives, pharmaceutical executives, insurance executives, hospital executives, they're all under fiduciary responsibility to grow their income, grow the revenue and do the best thing for the company.

But you can see that if we're looking at placebo or even other types of interventions that are not patentable—but I'm specifically speaking about a placebo here—we need to maximize this as much as possible. It's insane not to. It's the best resource that we have for keeping people healthy, and we need to really look at ways to be able to maximize placebo. So that's the sixth way that I feel like medicine is opposite and another one of the eight areas.

The seventh area that I want to look at is food and the role that food plays in medicine. So if you were to go into your average hospital now, you would probably think from your little trip that food had absolutely nothing to do with health. How else would you justify McDonald's and Burger King in a hospital? In a hospital. There are plenty of examples of Burger Kings and McDonald's in hospitals all across, not only this country and the U.K. So whoever's thinking about this doesn't think that food plays a role in health otherwise there's no way you'd have a McDonald's.

I've heard so many stories of people coming into a medical center with a heart attack. And they're fed Jell-O for a few days. And then three days later, “Oh, their heart's better. But I think you might be pre-diabetic.” “Well, I've just been eating Jell-O for three days. What do you think?!”

So the food in hospital is terrible. Doctors are not trained anything about food. They're trained like three hours in nutrition in medical school. We've documented that so many times. So many doctors have told us that. There are movements afoot to deal with that.

But think about the time and the effort. And how long is it going to take to write the education for doctors, actually get doctors that education? We're talking dozens of years to really evolve medicine to a point where we treat food with what it really is, which is medicine.

Food is medicine. And every forkful of food is either inflammatory or anti-inflammatory. And you're choosing your long-term health prognosis every time you pick up a fork. If you eat your first McDonald's, it's probably not going to kill you. But your thousandth one might. So that's really a big part of medicine.

And, again, it made sense under acute disease not to have any interaction with food, to treat food as fuel because the majority of the negative side effects of eating food don't occur straight away. They occur over time. And so again, with a reductionist system, you don't see those negative externalities until much later. And then it's too late to do anything about them.

And whether it's Terry Wahls' talk last year where she had MS and was in a wheelchair and recovered to a point that now she's walking and running and biking and looks unbelievably healthy through eating nine cups of greens a day, or whether it's a slightly less aggressive approach, but it's people losing weight, getting healthy. You're going to hear from a lot of people on this summit who have had their own personal journey where they were sick, and they got themselves healthy. And now they're sharing their story with the world.

How many times have you heard that story? It's what's driving this movement. And you can think of all the people who do CrossFit, who do Paleo, all the

people who are vegetarians or vegans. They're all taking action to be able to not just eat the Standard American Diet of processed food. Because if you're following the news, you'll see that these foods have been actually created with the right amount of sugar and salt and fat to keep you addicted.

And so the first thing that we all have to do with food is sort of step out of the herd. And we're going to hear in this summit, in last year's summit, and all the way through our education of food is medicine as a basis for a new medical system. And you can see, again, food as fuel versus food as medicine. No impact on health versus the fundamentals of health. Again, it's completely opposite. So that's seven.

And the eighth one that I want to share...And these are really eight areas where we saw medicine was evolving last year. But what I'm hopefully sharing with you is that these are opposites that are difficult to reconcile. We have food as the seventh one.

And the eighth one here is technology. Now, when I say technology I mean it in all areas. There's the technology that's bringing you this talk at no extra cost, which makes it available. And that sort of technology of scaling, education, resources, and those kind of things.

But other areas where I'm talking about technology is really like your touch in with the medical system. So up until in the old system, first of all, it didn't make that much sense for you to have an interaction with the medical system before you got sick. So there were annual physicals and what they called preventive medicine, screenings, and those kind of things. It wasn't actively preventive. But it was just sort of following along with the system and making sure that your vitals were in good shape.

So that's sort of a low touch system, you may want to think of it. Less than technology is touch. How often were you touched by the medical system? In the old medical system for acute, if you stayed out of the medical system your

whole life, you probably were in great health and you probably didn't need the doctor and that was ideal. That's what we wanted.

But now we have a situation where everyone has the potential to have real-time access to all of their data. So look at the rise of the Apple watch. That came out exactly the same time as our summit last year. It came out actually on the day of our technology day last year. And the Apple watch is, to me, a signal of the fact that we're going to moving into a time very soon where all of your data is going to be immediately accessible.

And you're going to know what your blood pressure is, not from a once off visit to the doctor where maybe your blood pressure is higher than normal because sitting in the waiting room sucks and waiting for the doctor sucks and you may just be nervous about seeing a doctor anyway because you're only one little conversation away from him telling you you have cancer.

And so people are nervous about those kind of situations any way. Now we're moving into a situation where you could get your blood pressure twenty-four hours a day from your smart watch. And so here's a situation where we're moving from a low technology to a high technology situation. And in technology, you actually don't need all of the assets that you need when you're doing regular medicine.

Think even as psychiatry, for an example, right? The original psychiatry was done in a hospital where you were getting electrocuted and lobotomized and all the other crazy stuff they did for psychiatry back in the day. Now they start drug-based psychiatry. And now you can see a psychiatrist in a nice, comfortable office where you can go and see that psychiatrist. And he can produce drugs and give you drugs because you don't need the physical infrastructure of a hospital with the electrocuting equipment to be able to deliver it.

And so now you get into a situation where you can see a psychotherapist or

psychiatrist on your phone through telemedicine. And so you can actually have those sessions in your house where you can make positive associations with the things that are in your house and you can keep yourself healthy in that way. So we're moving from a low-touch medicine to a high-touch medicine. And so that's another area where medicine's evolving. And again, it's another opposite.

So I hope through the last half an hour that I've sharing really these eight opposites you get an understanding of the fact that the cost of changing a medical system that was built for one thing and turning it into a system that's built for another thing is going to be way too slow, way too time consuming, and way too expensive.

And so it got me thinking about healthcare from scratch. What would it be like if we could actually...All of the conversation about medicine is always about how quickly we can change from what we have to what we need. And I want to throw that out today and just say, hey, with technology being so scalable and allowing the scale and value there, with other things happening at the same time, is there a rationale for starting healthcare from scratch? And I believe that there absolutely is.

And there are three fundamentals that I think that we could build healthcare from scratch on that would allow us to create a separate medical system that's really designed for preventing and dealing with chronic disease. So acute disease, we're doing well. There's a system that's already for that. But that system trying to do chronic disease is what's getting us in trouble because medicine is only exacerbating chronic disease because the side effects of being on any drug past a certain number of months is, one, untested because most drugs or vaccines are tested only in a short period of time because that's what it takes. In order to do reductionist science, you can only have one variable that changes. And so you need to keep things the same. And so they aren't tested over a period of time. So you're taking your chances with that.

But the third biggest killer in America is disease and death caused by doctors, iatrogenic disease and death. And so we can see there that medicine is actually delivering a lot of disease, never mind all the acute infections that are delivered in a hospital environment. Why I think you should stay out of a hospital if you can at all costs because it's really the best place to go to get an antibiotic resistant infection.

And so there are three starting points or three foundations that we're looking to build this new healthcare from scratch. Now as I said at the beginning, we're not just talking about healthcare from scratch. We've been building healthcare from scratch for a year and a half. So this is what we've been building.

So one of the foundations of health care from scratch has to be functional medicine as the operating system for all the reasons that I spoke before because functional medicine is proactive. It's holistic. It's patient-centered. It's community focused. It's microbiome maximized. It's placebo maximized. It's getting towards being high tech, and that's what we're going to talk about. And it treats food as medicine.

All the things that medicine does wrong for chronic disease, functional medicine does right. And it's the prevailing paradigm. And we're about to see the radically fast and rapid adoption of functional medicine, not only into private practice, but into mainstream medical systems. Just last August in the Functional Forum with Mark Hyman, he talked about nine months into the project of bringing functional medicine into the Cleveland Clinic, we're now at a point where everyone in the Cleveland Clinic likes it. They're seeing that it works, and they're having a lot of success.

Now, one of our roles at the Evolution of Medicine™ is we see that the way that this could happen even quicker is for doctors to do functional medicine in private practice because you could start to do whatever. If you start a private practice doing functional medicine, you can do whatever you want. And you

can deliver functional medicine right now. And that's why we've looked to accelerate the evolution of medicine by providing doctors and practitioners the tools not only to understand functional medicine, but to actually practice it right now in functional medicine.

And if you are a practitioner or a doctor and you're listening to this and you're interested in that, on Sunday, September 27, on the seventh day of the summit, we are going to be doing something that will be perfect for you. And I'll get to that in just a minute. But functional medicine is the operating system.

The second foundation has to be coaching. Coaching is not something that came from medicine. Coaching is something that came from business because in business they realized that you had to have behavior change. Behavior change was necessary in order to get employees to do things better. And if they did things better, everyone made more money. And so coaches we used in business and have become ubiquitous in business.

Over the last five years, you've seen a massive increase in the interest in health coaching. Why? Because it's so obvious that this is such a lack in the modern medical system. We need people who can empower behavior change. Doctors aren't taught to do it. That's what coaches are.

So in the Functional Forum, part of the reason why we have our meetup groups is for doctors to meet coaches. Our first ever meetup group was in Mass General, one of the most conservative bastions of medicine. And it was done by a couple of health coaches that set up a meetup in one of the most conservative hospitals in the country. So that is proof that this is happening.

And what we've been trying to do is really to connect doctors and coaches and have doctors see the benefit of coaches and try and connect them. And that's been working really well. So functional medicine and coaching.

And then the third foundation that really brings this all together and why we think starting from scratch is a much more sensible way of operating is technology. And what we've also been doing for the last number of years has been to connect doctors with technologies that allow them to practice this root cause resolution, functional medicine, in a much, much more efficient way. It's very inefficient right now. There's a lot of paper, and there's a lot of time, writing down paper charts, taking time.

One of the technologies that we launched to our community this year was something that digitizes and visualizes the whole functional medicine intake process, which really delivers that patient-centered diagnosis. We also have we've been working with telemedicine organizations. We've got organizations that train coaches in how to understand functional medicine so they can be a synergistic participant in a clinic that's doing this type of root cause resolution medicine.

So we've been building these three foundations for a couple of years. And so that's where I think is the future of medicine. So what we're advocating is healthcare from scratch, built on these fundamental principles. And we will continue to build that.

And so what I want to do right now is to just share with you some of the highlights from The Evolution of Medicine™ Summit and what you can expect if you sign up. If you're listening to this, then you've already registered. And welcome. Thank you so much for being part of our community. We're building a robust community. We're building communities within communities because we see that that is really the leverage point and the inexhaustible resource that we have at our disposal. So thank you for being here.

So if you got this, you also have access to our initial keynote presentation, who is from Chris Kresser. Chris Kresser was the keynote on the Paleo day last week. But Chris is a great thinker. And he has really, he's someone that all of the functional medicine doctors that I know look up to and look to to his

content and his website and his writing and his podcasting and his books and everything that he's doing. So there is another presentation available from Chris Kresser when you register, all for free. And it's on healthcare from scratch. And it's really looking at sort of the fundamental principles of it. And he brings together functional medicine ideas with ancestral health and Paleo concepts in a really elegant way. So I really encourage you to listen to that.

We also have the best of last year: Dr. David Katz, Dr. Mark Hyman, and Dr. Deepak Chopra, which are available as you register. So these are things to get you revved up. So if you recommend this summit to anyone, send it out to other people. They'll have access to all of that.

Then on September 21st the actual summit starts. So between September 21 and 25, which is the first week, Monday through Friday, we're really focused on delivering value to the end users of healthcare: patients, how to empower themselves and how to keep themselves healthy because one of the things one has to do is to really step out of the herd. The herd is going over a cliff.

If you look at those numbers, everyone's getting chronic disease. And certain social demographics are actually living fewer years than their predecessors, which, has never happened in human history. And so there's very many reasons to be very worried. And the first thing we have to do is get ourselves out of the herd.

So on Monday we're focusing on sort of like the basics of that, the mindset and some of the structures that are required for that. And if there's one highlight that I'd recommend, we have Dr. Rangan Chatterjee, who I think is going to be a superstar of functional medicine. And we'll discuss that on the talk. But he is emerging in the U.K. as a leader and really showing how lifestyle and functional medicine can drive best health outcomes. So Rangan Chatterjee.

And also Dr. Pedram Shojai. He is an oriental medical doctor. And he has

some great ideas on really how to be healthy in ongoing, stressful, urban environment that most of us live in. And he's got some great content, but he's also a great thinker. And Pedram and I have been working this year on corporate wellness and ways in which businesses...Now, I'm sure if you're listening to this, you have a job. Or you may not have a job but you know people who do.

Business is one of the biggest ways that the medicine is going to accelerate because basically businesses have incentives to keep people healthy and not have people get chronic disease. And so definitely listen to that. There's great stuff on Monday. Dallas Hartwig's great. Marc David is also great. Every talk is great on Monday, really setting the foundation.

On Tuesday we're talking about women's health. And with the new science showing that the majority of your microbiome comes from your mother when you're going through the vaginal canal, women are really the leverage point to keeping our humanity healthy. And so we've got a whole day dedicated to women's health. So we have our biggest fan from last year, Tosca Reno, who's a celebrity in Canada. She's coming to talk about really her experience of being a fan of the summit having already been a health celebrity and what she learnt last year. Alisa Vitti's talk is great there. Deanna Minich got great talks on Tuesday.

Wednesday we have a whole day dedicated to the gut and the microbiome. If there's one part of the body that's the leverage for all health, it's the microbiome. And so we've got innovators like Donna Gates who's built an ecological perspective of the gut that she's been communicating for decades. I'm really excited to have her on and a number of other speakers talking about the power of gut health and ways to keep yourself and your family healthy through gut health. So that's whole day on Wednesday.

On Thursday we have a whole day dedicated to the big epidemics, the modern epidemics of our time: cancer, heart disease, mental health, autoimmune

disease, and diabetes, type II diabetes. And I really feel like diabetes, type II diabetes, is going to be the disease where we actually see a massive change in health care because it's really expensive. It's really expensive to manage. But it's actually quite easy to reverse, not that easy, but easy enough.

And we have Dr. Brian Mowll who's The Diabetes Coach who's going to come on. And I highly recommend you listen to that one and share it with anyone who has diabetes. In fact, what a great asset for anyone who has any of those diseases. The evolution of mental health with Dr. Hyla Cass is great. We're talking about autoimmune disease. We're talking about cancer, ways to prevent it and what your power moves are if you get diagnosed with it so that you don't end up being an iatrogenic death.

And then on the Friday we have the evolution of nutrition and the evolution of nutrition is really looking again at Paleo concepts. We've got Mark Sisson there from Mark's Daily Apple, a really great thinker. Sarah Ballantyne, The Paleo Mom is a great thinker as well. Sayer from GreenMedInfo. Lots of great stuff in there. It's a really powerful day.

And then just like last year on the Saturday, we're going to start the practitioner weekend. So the weekend is really designed for health providers of all sorts. And I think on Saturday, the 26th of September, we might have the most powerful lineup of clinical speakers ever assembled into one conference. And maybe, when I tell you who we've got, maybe you can be the judge of that for yourself.

So the first and a keynote on that day is actually it's a very sad story. Earlier this year I had the opportunity to meet and connect with actually last year met with Dr. Nicholas Gonzalez who is a doctor in New York who has had absolutely remarkable results with cancer. You will hear on his talk, there are results that he has achieved in his practice that literally have not been achieved anywhere in medicine.

And his talk on individualized nutrition and what factors you should individualize your nutrition based on is mind blowing. And he, I think, will be seen in the years future as a genius. And I'm very, very excited to bring his talk to the world to anyone in the world available for free through this summit.

Dr. Kelly Brogan is also on that day. And she is a mentee of doctor of Dr. Gonzalez and is talking a lot about how doctors and practitioners can break free of fear and the shackles that have been put on them by standard of care and actually practice great root cause resolution medicine.

Dr. David Perlmutter was one of the favorites from last year. And he's back to talk about the gut-brain connection, particularly based on his new book *Brain Maker* that's all about microbes and the gut-brain connection. And it was absolutely fascinating. And he's a great speaker, very funny. And that was a really great interview.

Dr. Alex Vasquez and Dr. Richard Ash are two naturopathic doctors that round out that day. Dr. Vasquez is talking about functional inflammomology, how to reduce inflammation. And just last week there was an article saying reducing inflammation consistently is your best ticket to live to 100. So his ideas on functional inflammomology should be interesting to every doctor and every health professional. And patients can listen to this too.

And then Dr. Mike Ash is talking about our new view of pathogens. Our view of pathogens has to change in the era of microbiome. And he's got some great resources there for anyone to get educated. So that's a great day there.

And then the last day is on Sunday, September 27. We will be doing an all-day, eight-hour live practice management marathon. This is a big thing about what we do. I've taught practice management at the George Washington University, the A4M Program. I'll be teaching later in the year at the ABIHM Conference. And we have our collaboration with the Institute for Functional Medicine.

People are interested in the concept of the integrative micropractice because what we see is that there are a lot of doctors that want to deliver this medicine but can't deliver because they're still stuck in their full-time job doing something else. They're passionate about it. They just can't find out a way to do it every day. And they're waiting for the Cleveland Clinic to hire a bunch more doctors or the next hospital that's near them that may be five, ten years away.

So the truth is we really need to help doctors and practitioners to develop strong, sustainable, integrative micropractices, low overhead practices where they can leave the job they hate, practice the medicine they love, keep themselves healthy. And we're going to talk about everything from developing the systems, marketing, corporate wellness, how to have a great staff.

We're going to be answering questions all day live. It's going to be on our YouTube channel so make sure you go over to YouTube.com/FunctionalForum and subscribe. And we'll be doing an all-day marathon on that day and can't wait to welcome you if you're a health professional to that.

On the Monday, we'll have a recap of people's favorite talks from the week. And that will be the Evolution of Medicine™ Summit. Every speaker that I interviewed, I asked them their thoughts of evolution of medicine and healthcare from scratch and particularly what their contribution would be to healthcare from scratch. And I think you'll find there's a vast array of extremely elegant and extremely well thought through answers. And I'm very, very excited to unleash this on the world.

But I know you've waiting very patiently for the big news. And the big news that I want to share with all of you is there's obviously been one missing piece that's been missing from medicine in America. We have these doctors. People are going to them. It's a little bit expensive. It's not for the middle of the bell curve yet. Generally, it's not available on insurance.

And this has been, to me, the glue that's necessary. We need an alternative to health insurance that actually incentivizes people to be wealthy and healthy—both because health insurance premiums are jumping by another 30% this year. So we need ways to keep people healthy. We need a system that pays for truly preventative medicine.

It would be ideal if it could be a 501(c)3 non-profit so that not anyone's making billions of dollars and we're not incentivizing things in the wrong way. It would be great if it could provide a health coach for people who had a pre-existing lifestyle condition so that they could get themselves well. And it would be great if it could build on the power of community because that's really one of the greatest forces that we have at our disposal.

And the good news is we don't have any sponsors this year's summit. We're only launching this new program. And it's called Liberty Direct. It's not health insurance. It is a community-supported health sharing system. It already serves 35,000 people. They have an exemption from the ObamaCare mandate. And we have been working through this year to be able to build a digital interface on top of that that will allow to be a truly remarkable healthcare experience.

And so if you're interested in finding out more about it, there will be links all over the site, wherever you would normally see sponsors. We'll have a link to Liberty Direct. But if you go there, you can see and you can sign up. As I said, we're not just talking about healthcare from scratch. We're building health care from scratch.

We believe that we can build a medical system that is much more free of conflicts of interest, delivers much more efficient, effective chronic disease management and can provide a template for the future of chronic disease management worldwide. Our goal of the Evolution of Medicine™, we've been inspired all the way through by Bucky Fuller and his quote where he says, "To change something, you don't fight the existing reality. To change something,

build a new system that makes the old system obsolete." That's been our goal. That's been our vision.

This summit, from what you've heard hopefully in the last hour, gets you excited that this is the future of medicine. We are building it. We are very grateful for you to be part of our community. And we look forward to sharing all of this great information with you.

If you're inspired by this talk, please share it out through social media, through your email contacts. Get together a group of people to watch one of these talks per day in your community. There's so many ways in which the power of community could be accessed. And one of the things that Dan Buettner of *The Blue Zones*, when they tried to create blue zones in America right now, what they're finding is the most valuable thing, the most evidence-based strategy, is to find people who are ready to change and introduce them to each other because when you can introduce people to each other, then you can get to a point where they can create new communities of doers.

And what we need is doers. We need people who can take initiative. And that's the thing about initiative. It can't be given. It can only be taken. And my greatest wish is that anyone who listens to this whole presentation and listens to this summit will take initiative to get themselves and their family healthy and then look to see how they can inspire health in their community.

So I've been your host, James Maskell. I really look forward to your feedback from this talk and from the summit in general. I think it has the potential to be a moment of cultural significance if it goes off the way that it does. But it really needs you to take initiative and to share this with your community. So thank you very much. We will see you the week of September 21. I'm your host, James Maskell. And we'll see you next time.