



In Conversation With Jeroen Tas and Bernard J. Tyson

Speakers:

Jeroen Tas, Philips

Bernard J. Tyson, Kaiser Permanente

Moderator:

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(Transcription by [RA Fisher Ink](#))

Kirkpatrick: The next is really a conversation with two great healthcare leaders about what is happening in healthcare and how our politics and our policy need to evolve to accommodate it. Bernard Tyson, who is the CEO of Kaiser Permanente and Jeroen Tas, who is the CEO of the Philips Healthcare Informatics.

I wanted to start by referring to a session that Jeroen was at and that Bernard's CTO, John Mattison, was at on Wednesday. We had a half-day Techonomy health round table that some of you attended. And the message that I took away from that more than any other, is that the changes that are needed and are possible in healthcare are almost incredibly obvious, at this point. And yet, there is virtually no mass-scale movement toward adopting them.

That's the situation that predated the election of Donald Trump. But I guess what I'd love to ask you both to talk about is, what are the prospects? Certainly we can get into the details of what needs to happen, what can happen, how Kaiser is doing things differently, the amazing tools that Philips is making available, but what is the likelihood that we might have a phase shift, for whatever reason, and finally start doing the things with technology, and in networks, and integration, and measurements, and data, that we now see are so possible with today's technology? And how is that possibility shifted or changed by the election of Donald Trump? So, do you want to tackle that, Bernard?

Tyson: [LAUGHS] Good morning. I don't have any doubt in my mind that the industry will be forced to change in this direction. So, I don't think it's any more a spectator sport, where somebody decides "I can," and others, "I'll stay on the sidelines."

I think that the evidence is becoming clearer and clearer that we have a real opportunity to transform the healthcare delivery system in this country, in fact, in the world. I've talked a lot about, for example, as you know, I'm a big believer about technology enabling us to even rethink how we think about healthcare now.

So, when I look at last year, something I've been talking about, we've invested in our digital strategy, big-time. Because that is the future now. And last year, our primary care visits with

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our members, almost a hundred-and-something million encounters, 52% of those were done virtually.

Kirkpatrick: And you take care of 11 million people?

Tyson: Yeah, 11 million people. So, we've already seen the dramatic shift in our members' response to, "Do I want to drive across town and spend two hours for that 15-minute encounter for this problem or follow-up or something that I need? Or in my relationship with my doctor, can I get that taken care of through a secure e-visit, either a phone conference or a video conference or using the iPad, iPhone, PCs, etc?" So, the majority of those encounters last year, in the primary care area, happened virtually. That's a major shift—

Kirkpatrick: That's a big breakthrough.

Tyson: —we call it inside of Kaiser Permanente, "Care Anywhere". So, if you look at the industry that started with, because people got sick, we built an industry to quote, "fix them." We designed everything that centered around a hospital setting and then we put all these things around it and we told people, "You have to come to us for everything in the industry." That's been the industry.

What we're proving is, no, that's not the right make-up now. There are many things that can be handled with the wonderful technology that's been invented and that's already here. And it's allowing us to begin to rethink, "How do we think about healthcare in the 21st Century?"

The last thing that I would say is that for us it's such a sweet spot, because our model has always been designed around prevention, early detection, early treatment. So, we have wonderful opportunities going forward to even go farther upstream in, "How do we think about prevention?" and for us it is now the theme of the social determinants of health that is in our line of sight, not just medical care.

Kirkpatrick: Ok, I wanted to just quickly interject, for anybody doesn't know this, what makes Kaiser so different? Can you just quickly summarize why is Kaiser so different than most American healthcare systems, generally?

Tyson: Well, it's a fully-integrated system that brings together the coverage and the care. So, it's both the insurance and the care.

Kirkpatrick: In one, yes, so you're incented differently.

Tyson: Into one setting. It's based on a capitation model, a prepayment model, where we're paid to accept the risk of the health and well-being, in this case, of almost 11 million people. And we take that money and design a delivery system and a care system to cover them from prevention to chronic care.

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Kirkpatrick: So, it's almost like, for people who are in Kaiser Permanente—and either they or their employer are paying for this—but, it's almost like national healthcare for those 11 million people.

Tyson: That's right.

Kirkpatrick: Before we get to the non-American on the panel, I want to make sure that I get out of you, what Trump means for all this.

Tyson: [LAUGHS] I've been asked that question all week.

Kirkpatrick: I know you have.

Tyson: What it means, I'm not sure, just like everyone else. The topic of the week in healthcare has been, "So, now what happens with the ACA," because he's been clear during the campaign that he's going to repeal the ACA. And my response, obviously, is I, like everyone else have said that it's not perfect and it's only about, I would say, 25 to 30% implemented. And that whether it's the ACA or something that's going to replace the ACA, underneath it we still need to take care of people. And I don't believe that once the new administration gets under the hood of the ACA, that we're going to end with the same narrative that we've been hearing up until now. I don't believe that this new administration is going to un-insure 20 million people in the first 100 days, for example. That's been forecasted. That's the consequence of quote, "repealing."

I don't think that this new administration is going to drop coverage for children who can go up to the age of 26. That's the reality of what a repeal means in this first 100 days. I don't think that this administration will just haphazardly now reintroduce pre-existing conditions as a qualifying factor as to whether or not you get coverage. I think that once we get to the reality now of what we're actually trying to solve to, which is now the headache of this new administration, just like it was the burden of the old administration, working with all of us in this country. I'm hopeful that reasonable minds will start to work together and figure it out.

Kirkpatrick: That was a very good way to put it.

So, Jeroen, one of the things that I know you think a lot about that is really pertinent to this and again, you can give a more global point of view being Dutch, etc., but one of the things that Philips is really contributing to is this dialogue about outcomes-based medicine. Which, we would also say is kind of the big, missing element in the ACA today. It's basically been sort of insurance reform up to now, in a certain sense, but if and when we can layer into some form of American healthcare, a real emphasis on keeping people healthier so costs go down by that means, then we really could have a revolution in health in America and the World. So, talk about what's possible and how you look at this whole picture in the United States in particular.

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Tas: Well, number one, I believe Kaiser is the great, shining light when it comes to a strong healthcare system that's focusing on patients and their needs. About 86% of all costs goes to chronic disease. Chronic disease has a set of characteristics. It's with you all the time. It's heavily influenced by social-economic factors that Bernard mentioned, but also health behaviors. You find that if 50% of the people around you smoke, you'll probably have a high probability of starting to smoke. So, if we look at healthcare today, it's really organized around acute events. Something happens, you go to a doctor and you get reimbursed that way. Reimbursement drives the incentives. If you're getting reimbursed for procedures, you're going to maximize procedures. So, like somebody said, if you pay for sickness, you get sickness. If you pay for health, you will get health. I think that's the big change we're going to make.

Now, it was very hard to measure outcomes. Because the systems were not there. You cannot baseline it, you don't have the data. But that's changing very rapidly. I think right now you can look at a population or Bernard can look at his population of 10 million, 11 million patients, and he can actually see the health of that population. He can stratify and say, "Hey, I have millions of people with type 2 diabetes and guess what? They are either at-risk or they have heart failure." Now, these people carry that with them every day. They need to be helped, they need to be supported, they need to be monitored. If I do that right, getting back to what Bernard said, if I can do prevention, if I can do early detection, if I can do early intervention, I will dramatically drive down the cost of care. And that means that a lot of the care won't take place in the hospital. It will take place at home. It will take place wherever you are. And it will require a new way of organizing around it. It will be communities, it will be friends and family who participate in care. Interestingly, talking about another country, the NHS has similar problems in the UK, but there are also 1.5 million volunteers, people that actually give their spare time to help people. But they don't have the tools to participate in a coordinated way, in the care of the people that they give their spare time to.

So, I think we can use technology to better understand the needs of those patients, organize around those needs and there's nothing new, because I did it at Citibank 20 years ago. We segmented our customers according to their needs. We decide, "Hey, maybe we should create products and services that address those needs." And I think, in healthcare, we're going to see the same way. There will be branded services for people with certain chronic conditions. There will be branded service for elderly people that want to live at home and 70% of the elderly people with multiple, chronic conditions prefer to stay at home. So, we can use technology to monitor them, to help them. And I think the more proactive we are in reaching out to them and the more proactive we are in engaging the wider community, which we can do through technology, I think the better the outcomes will be. And, so, if we're driving and we're reimbursing towards those outcomes, which we can measure now, I think the incentives will change.

And, for instance, we know that half of the people don't take their medication. In this country, we spent \$400 billion in medication, half of the people don't take their medication or very

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irregularly. That's strange. To me, that's one of the big things that will change outcomes, if people regularly take their medication, they do their sleep-eat-walk, and that has a huge effect—

Kirkpatrick: Their what?

Tas: Sleep, eat, walk.

Kirkpatrick: Sleep to eat?

Tas: Sleep well, eat well, and walk.

These are critical aspects of health. And if you look in the many, many places where we've seen the positive impacts. In Bernard's network, but also in other forward-looking networks like Banner Health, we've seen that proactively monitoring people at home with multiple chronic conditions, and maybe even onset of Alzheimer's, will reduce readmissions into hospital by 50%. It will reduce emergency care by 60, 70%. It will reduce costs by 25%, but only if you reimburse on outcomes. Because if you do it on procedures, you'd rather have them come to the hospital four times.

Kirkpatrick: Well, one of the great things about having you here with us, is that probably no institution knows more about, has done more outcomes-based medicine, than you. And just to reiterate, one of the points of this conversation was policy recommendations to the next administration before we knew who it was going to be. So, even leaving aside ACA, based on what you've learned, what are some easy things that the United States could move toward that seem to you to be no-brainers?

Tyson: One that was just mentioned is, we still need to redesign the infrastructure of the healthcare system of how it gets paid. And that fee-for-service model does exactly what you just heard. It incents more procedures being done. So clearly, I would be a strong advocate that we need to continue, not necessarily for the whole industry to go my way with capitation, but there are models out there where you start to realign incentives, and you force the industry to work with itself to create that kind of alignment of incentives like we have inside of the Kaiser Permanente model. So, a physician inside of Kaiser Permanente doesn't get rewarded or penalized if they pick one access to care versus the other. So, we don't get more money by having more patients in our hospitals. And we don't lose money because of that.

The second thing is to continue to reward the focus on prevention and early detection. There's a big difference between a system like Kaiser Permanente, who is monitoring you 24/7, and can see with the vital signs that you are working your way towards dehydration or a stroke, or something to that effect.

Kirkpatrick: You've got some kind of monitoring device on you. What is that?

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Tyson: That's just my Jawbone for walking, to your point. But, by the way, this is going to be the future of medical devices that augment the human, devices that will help a person to early-detect that something is going wrong. I've used the example, remember when Hillary Clinton almost passed out?

Kirkpatrick: Yes, how can we forget?

Tyson: In the future people will be having medical devices and we'll have a warning system that will say, "Your body is dehydrating, your blood pressure is going down, you need to—" And those are the kind of things that are coming in the future. So, a system that would incent me to invest in the technology and everything to keep you healthy, to tell you before you land in my hospital that you are deteriorating and now we need to intervene, is what this economic system would need to motivate, for this industry to keep moving forward towards the outcomes that we use now and that are being described.

Kirkpatrick: Well, one thing we heard about, I think it was Eric Topol at the health round table was talking about this. The question I have continues to be, "How do we move there?" and "How far are we along on a movement to push us there and what can we do?" And, I guess, Eric was talking about this idea that a number of big employers, Coca-Cola, he mentioned, I think IBM and others that have hundreds of thousands each, that they have to insure, pay for the insurance, are coming together to start figuring out how to collectively demand some of these changes in the system. Is that the way, maybe, that it's most likely to start to happen?

Tyson: I think, it's part of it, no question about it, the employers still, by and large, cover most Americans. So, most Americans are covered with the employer plans and then the rest is pretty much the government. The employer has a tremendous voice in pushing for more change and expectations. And a lot of them, the ones you mentioned, they look inside of organizations like Kaiser Permanente and they also look inside of organizations like Philips and others that say, "Ok, where are we going with technology. What's the forecast of the future?" Then they come and ask people like me and others, "Now, how are you embracing this technology, and what does it mean for the population that you are taking care of?"

And so, just a case in point right quick, we have all of these registries that we have patients in. I know how many of my 11 million members are diabetic and I know the kinds of outcomes that we should be measuring to determine whether or not they're going to have more and more severe problems as they go along. And one of them is the blood sugar checks. And so, we can monitor a population and individuals, and we've set goals, and we report those goals to my board that this diabetic population, the goal is to keep their blood sugar at 7 or below. And we know if they get to 9 to 11 they have moved into a new area of risk. And so, that's an outcome that we can measure that is concrete to what will happen if we do not help them to get that under control to their physical bodies.

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Well, it takes the kinds of investment that I have described to be able to do that for a large population, and those are the things that we do. We know when a member is not taking their medicines, because they have to order and re-order. So, after a given time the technology will tell us from the pharmacy division, "Bernard Tyson, your patient was due for a refill in 30 days. It is now 36 days later, you might want to check on whether or not your patient is taking his or her medicine." We're now using the technology to send you reminders every day of why you need to take this medicine and what time you need to take this medicine.

Kirkpatrick: Do you text people, what do you do?

Tyson: Yeah, remotely.

Tas: What's interesting is, we discussed this also with the Minister of Health in the Netherlands, and what she said is, "Start with the patient association." So, for instance, I met frequently with diabetes association in the Netherlands. There are more than a million diabetics in the Netherlands, out of a population of 70 million. Now, all these people felt, and all these people have families that care about their condition. So, it's almost becoming a political issue. And by working with these associations, you start explaining to patients what it can mean to them. What it can mean if we give them better tools to control their condition. If they're connected 24/7. And then we turned around and said, "Okay, let's talk to some of the bigger providers." And we suddenly see something of a movement happening, and then the minister also said, "Well, I think we should actually give every citizen their own, personal cloud, where you can keep all your health data together, which then can be used to provide care, to intervene, and to basically move from provider to provider without lack of continuity.

Kirkpatrick: Is that in process now?

Tas: That is in process now. That will take time as well because it requires different—the payers need to be part of this, the providers, but we can see increasing willingness to move in that direction.

Kirkpatrick: Okay, I want to hear if anybody in the audience has a comment or a question.

Robert Klitzman: I'm Robert Klitzman from Columbia University.

Kirkpatrick: And you're a psychiatrist?

Robert Klitzman: I'm a psychiatrist and I run a bioethics program at Columbia.

Two-thirds of America—social determinants of health, I want to come back to—two-thirds of America, as you know, is obese or overweight. Of adults, one-third's obese, one-third's overweight. A lot of that's because of practices of big food. Companies that are incentivized to have us eat a lot. So, how do we address that? In a lot of this, we're looking at the end result

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of still people getting sick. Are there ways to re-incentivize that, how do you think about that as a problem?

Tyson: That is a great question. So, first of all, just very quick, in terms of social determinants of health, the way we think about it inside of Kaiser Permanente—and don't take these percentages as if they're just written in the bible, but just so you get the range. About 40% of a person's health is determined by social behaviors. What you eat, all those kind of things, smoke, drink, all the things we have the freedom of choice to do. About 20% is based on genetics, family history, and all that. Another 20%, we project, is based on place, where you live. And then the last 10% is based on healthcare.

Kirkpatrick: Wow, those are interesting percentages.

Tyson: Yeah, so our point is why should we just stay in the lane of healthcare when that has a very limited impact on a person's health. So, that's why have farmer markets all over the country. In communities that lacks grocery stores, etc., we've been promoting fresh fruit and vegetables, and once or twice a week we go into these communities. We have relationships with farmers of America and we together provide fresh fruit and vegetables, classes, online classes and on the likes.

Over time, I think that as we begin to educate people more and—not to get into a debate, do I believe in the sugar tax, but the sugar tax is one example of a choice that is made that says, "Drinking a lot of sugary drinks is not good for you, so you should pay more and, in essence, be penalized for doing that." And I'm not debating the value of the taxation and everything, but it's sort of like what happened with smoking. That, "let's tax smokers with the cigarette because they have chosen to do something that everything around research have demonstrated, this is bad for your health." And I think that's what we're going to have to come to terms with. How do we incent the right behavior without imposing on someone that they can't make still the freedom of choice about what they actually want to do with their bodies.

Kirkpatrick: One, more question, comment? Okay, right here.

Mark Bonchek: Hi, I'm Mark Bonchek, Shift Thinking. I want to ask a question about technology and healthcare that's kind of, right now, the downside of technology. So, there is a crisis in America of physician burn-out. And the AMA has said this is one of the top three problems. Physicians are dissatisfied. Suicide rates are skyrocketing, and a lot of it is because of the administrative burden of electronic health records. And I'm not saying that it doesn't have the potential, but the amount of time that it's taking for them to deal with the technology instead of dealing with the patients, they attribute to a major source of their dissatisfaction. So, what should be done, and can be done, to make sure that the technology is actually helping rather than hurting?

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Tas: I think what we're looking at is making it easier so that with voice recognition you can follow a dialogue, an observation, and extract the essence of what was discussed. I think what we also see is that artificial intelligence will play a big role in making sure that the trail of diagnosis, prescription, feedback loops, all stays together. Because it's not just entering stuff into a medical record, it's really following the diagnosis, treatment, and the outcome of that treatment. And that's an area where companies like ourselves invest heavily. Because we want to make it really easy for a doctor, for a patient, and a clinician, to have to write information, make it actionable, and minimize the manual entry. So, for instance, for radiologists, what we're doing, is we're ultimately bringing all the information together in what we call a "mission briefing". And then when we get the image, we already quantify the information on the image so that the doctor only needs to click. If he wants to override something, they can very easily do that, but you bring all the information together, you tee up some of the decisions, and then it becomes a matter of just clicking or confirming. And we see a lot of progress in that space. In a couple of years, I think that will be pretty normal, that the system itself will deliver the right information, will support the decision-making and follow things through.

Tyson: Yeah, I agree with everything and our doctors have been doing it now for a decade. And we've been leveraging these kinds of things. One of the biggest issues we still have to address, is that even within Kaiser Permanente, the regulations that we are in some cases meeting, is based on a non-technology environment. And so, part of the frustration of our physicians is that they still have to do things as if they were working with a paper-bound system. We've been trying to work with the regulators to begin to think through with the kind of technology backbone what's really required of a physician going forward, versus some of the things that physicians are doing that's based on a paper-bound system.

Kirkpatrick: Well, we've got to wrap, but it's such an honor to have the two of you here. A great conversation. I hope we can continue. Thank you.

[APPLAUSE]