



Forum for Health Policy

Podcast with Dr. Kaveh Safavi

Magnus Lejelöv: Hello and welcome to the healthcare podcast from the Think Tank Forum for Health Policy—a podcast trying to put the light on today's healthcare, sharing good ideas with the intention of creating the best possible healthcare for the future. My name is Magnus Lejelöv. I work for Colivia and I'm also an ambassador for health policy. You're more than welcome to this podcast. And today it's a special episode. It's the first one in English, actually. We are looking forward to it, both because it's in English, but mainly because we have an interesting guest from one of our members from Accenture, Kaveh Safavi. Most welcome to the podcast.

Kaveh Safavi: Magnus, Livia, nice to be here with you.

Magnus Lejelöv: It's a pleasure. Let's jump into the podcast then. How do you think Swedish healthcare would look in 2040?

Kaveh Safavi: Well, 2040 is a long time from now. I think that Swedish healthcare is moving in the same direction as many countries I work in. And the three characteristics that I think we can count on—the first one is that care continues to become more location independent or location agnostic, because it's possible to deliver care anywhere. That doesn't necessarily mean that it won't be delivered in hospitals or institutions, but the capacity is there and that means more optionality.

And it might mean at home, it might mean on a temporary basis. It might mean that you can convert a facility into a hospital on a temporary basis during a pandemic, as an example. But it's location independence. And that's really a combination of technical capabilities as well as people's expectations of care being delivered on their terms.

The second big one is that we are clearly running out of people to do the work relative to the demand for care, the shortage of workers. And that means that we are increasingly going to see the delivery of care being from a combination of both people as well as machines and technology. So maybe thinking about our care system or our care delivery system as a combination of human beings plus machinery, robots, other sorts of things that augment and scale our human capacity. And that's an inevitable response to a problem that we don't have any other better answers to.

And the last one is that we continue to make care more personalized on two dimensions. One is clearly biology as we understand human bodies differently. But the other is on the experience side, because people increasingly want care on their own terms. They want the care experience to be for them, similar to every other experience in life. And thinking about personalization through the lens, not only of biology, but also the experience of care,

is going to be a continuous direction versus having people conform to the way the care system is organized. That's what I mean by personalization of experience—those three trends.

Magnus Lejelöv: And how do you think we will manage that, going to the more personalized experience trend because that's a change of culture. That's always the harder thing, at least in Sweden. I'm not sure about anywhere else.

Kaveh Safavi: I would say it is and it isn't, right? Because I think people's expectations are being formulated outside of healthcare. We've been talking about this for a long time. Healthcare doesn't just compete, for example, with itself. It competes with attitudes and expectations and experiences that people develop outside of healthcare--banking, travel, financial services and retail. People know it's possible to know them and meet them on their own terms. And so, the gap between how healthcare is and how healthcare can be becomes greater. That source of frustration now becomes either an opportunity for innovation or it becomes the basis upon which regulation and policy get put in place to force the care system to be more responsive. And we've seen both of those responses occur in the OECD, in rich countries. The innovators and the startups fill the gap, but in many cases, the frustration leads to mandatory responses around location and waiting time and responsiveness. I would expect that it's going to be driven by the expectation of the patients and the citizens, and the system will have to conform to that.

Magnus Lejelöv: I hope you're right. Livia, it looks like you're going to ask the next questions, I think.

Livia Holm: Exactly. One thing that we always ask our Swedish guests is what we can learn from other countries to improve the Swedish healthcare system. You have a lot of experience working in a range of countries. What do you think are some things that certain countries do that other countries should learn from to a larger extent?

Kaveh Safavi: A very good question. I get it all the time. I've had the great privilege of working in healthcare in about 25 countries, mostly rich, but a few emerging markets as well. And I've done it over the last, let's say decade and a half. Time has elapsed over that. And people always ask me, "Is there an ideal healthcare system or a preferred healthcare system?" And I will tell you that it's hard to conclude that there is one system that gets it right compared to every other system. They're all different and they reflect a combination of factors, political factors, social factors, demographic factors, but there are some basic truisms that you see across all of them. While we often pay for care differently, the medical model is very similar when you look across all western countries because medical training and attitudes about the role of doctors and interaction between doctors and patients is remarkably consistent.

I think there's a few things that every healthcare system is struggling with. One of them is, what is the right way to create incentives for the healthcare delivery system to invest in the capacity to actually take care of people without requiring work to be done by caregivers? How do we substitute for the actual activity of care in order to get an outcome? Because in every model money moves from the payer of care to the providers of care based on activities, and it reduces any incentive to think of a different way to provide care that

doesn't require me to do work. That's true in any country, no matter how they organize and pay for it. And figuring out how to create a different set of incentives for the care delivery system to say, basically the way I would describe it, is when people wake up in the morning and they don't feel well, their objective is actually to get better, not to see a doctor.

But our model is built around the fact that you need to see a doctor in order to get better. And we know there are ways to solve this problem that don't necessarily always require you to see a doctor, but the incentive to create that model requires us to figure out how to move money into the healthcare system without you having to see a doctor as a requirement. So that becomes a challenge that we're all struggling with. People use different models and names for it, but at the end of the day, part of it is related to this idea that if we're going to create a financial reward system, it should be based on a benefit, not an activity. So-called value. Different people talk about it in different ways, what value is, but at the end of the day, the heart of it is, people want to know they're getting their money's worth, whatever that means, versus you just did an act. And getting that right becomes a real challenge. I think that every country is experimenting. No one has figured it out. What no country is experimenting with in a material way, but all of us need to, is realizing that we won't have enough people to do the work. How do we begin to incentivize the substitution of technology for human tasks so that we can scale our caregivers and meet the needs? Otherwise, we're going to have a gap between the demand for care and the way we deliver care that we will never solve.

Livia Holm: One thing you mentioned in the beginning is that this sort of transformation of the healthcare system will happen out of necessity, both from patient demand, but also from the realities of staff shortages and so on. We in Sweden right now are in the middle of an election year. And you mentioned also that unless the system by itself transforms, it might be forced to transform through reforms and such. What type of political reforms would you want to see more of in order to see this transformation happening in a sort of timely manner?

Kaveh Safavi: Well, I'm going to answer that question in two ways. The kinds of reforms that you typically see exhibited politically are what I would describe as pro-consumer reforms around concepts like choice, access, waiting times. It gets played out in all different ways, but at the end of the day, the government, the elected officials get elected by citizens, and they think about the problem through the lens of the citizen's experience—which is largely felt through concepts around access. However, as policymakers, there's a recognition that this complex system that we're built on is influenced by the flow of money. And so these conversations about, well, are you paying for the right things ends up becoming a policy issue. It's not an issue that voters care about. It's not an issue that politicians can run on, but it is ultimately an issue around governance.

And, in many countries, you always hear this sort of an adage. Healthcare is a great issue to run on, but it's a terrible issue to actually govern on because people can always have an opinion about how it should be. But it's immensely complex, and it's very—we have a term in the US—it's very wonky, it's very academic.

And it's not anything that anyone wants to hear or talk about. And everything that you fix, because it's a complex system, affects another thing. And so, it's super easy to say, "I wish we could do this." But when you get into the weeds, it's really hard. In many ways, I think what we have to do is sort of distill it down to what are the simplest issues that we want to solve for and stay focused on those as priorities.

We went through a period of time appropriately in most countries where we recognized that a limiting step to any of these things I described, a personalized experience, the ability to serve people without requiring human beings that really bring technology in, would fundamentally require digital information as a path to an end. And we recognize that we had virtually no digital information at all. So we started the journey in most countries by variations on the theme for encouraging the digitization of records. We've made some progress. The truth of the matter is most of the emphasis was on the digitization of biological information in the medical record. And modern technology needs tell us it's bigger than that. But I think that was an example of a recognition that, I don't know the destination, but one of the things that must be true is that we have a digital information foundation to act on. So let's start with that. And I think that's the nature of policy is what must be true, how do we put those foundational issues in place, and then we'll let the delivery system and the marketplace and the innovators start to build on that.

Livia Holm: And what do you think has to be in place for that to happen? Getting this digital infrastructure in place, because this is something that's discussed a lot within the Swedish healthcare system. We have national governance, but primarily we have

21 autonomous regions and 219 municipalities who all have to manage their data and figure out ways to share it. Are there some countries that are sort of more ahead when it comes to this that you could look at? Or, what advice would you give to our policymakers in Sweden to realize effective data sharing?

Kaveh Safavi: The nature of that question really highlights the distinction between what needs to be done and how it needs to be done. There is less debate about what needs to be done. The debate is largely how it needs to be done. And it's in every country in the world—modern rich country in the world—you have a healthcare system, which is a combination of very usually national or higher-level funding, and then very local execution. And, this dichotomy and federalization and the healthcare is delivered close to home. And so, the delivery systems increasingly become local and fragmented. And that the policy and the financing is set at a national or regional level is very common. And this is where you get into the challenges, right? Because the how's go through the localities and we see oftentimes, it's interesting.

Very simple issues like nobody debates what needs to be done, but everyone debates who's in charge. That's really the problem. They say, until I'm in charge, I'm not going to do anything. We see this all the time, right? It's a very complicated and challenging issue. And I think this is one of the real interesting art forms for our policymakers and our politicians, is to recognize that concepts like autonomy and control end up being big issues not only for policymakers, but even for healthcare providers. Because the culture of medicine and the culture of doctors is very much around autonomy of the decisions.

And even before we talked about digital and the issues I just talked about, go back 25 years ago, 20 years ago, when healthcare safety was recognized as a global agenda item.

In the United States there was a report in 1998 by the Institute of Medicine, it was called "To Err is Human." And it basically came out and said the equivalent of one jumbo jet per day of people are dying from errors in hospitals. That became the big calling card for a decade around reorganizing the healthcare system to make it more safe and to eliminate unnecessary errors. One of the biggest challenges was that the reason that there was so much variability that led to errors was the high level of autonomy that clinicians wanted in the way they did things. So even then this idea of you can't tell me what to do, we had to overcome. And so, we started to move the medical culture toward a concept of systemness in service of eliminating errors. Well, we're going to have the same dialogue, which is the concept of systemness in service, of getting to some end.

And I think that becomes an interesting political question. In another European country, the public health system where both the employees and the insurance company were all government, couldn't get the systems to share with each other. You would think that in theory they should, right? Because they're all the same legal entity. But the clinical autonomy was such that that was a decision that nobody wanted to do. In this jurisdiction the candidate running for office ran on essentially a platform that every citizen should have the choice to go to any care delivery component in the geography. Let's call it freedom of choice. They had no conversation about digital or

interoperability or anything like that. And then when it came time to go to the how implementation question, the dialogue happening at the level with the hospitals and the medical staffs and the doctors where they said, "Well, I don't want do this and I don't want to share." And essentially a conversation went something like this. I don't care how you solve this problem. You don't want to solve it my way, solve it another way. But you've got to figure out how to make it possible for people to go between locations. Because if you don't, I'm going to put you in front of them and you're going to explain to them why you think it's not important for them to do that. And I assure you they're not interested in that conversation. So I'm not here to negotiate with you the details, but I am telling you, you have to get to an outcome. And that became a political problem, right? So that kind of, let's call it political jujitsu, where basically the politician says, I'm not going to talk about the how, but I'm going to hold you to the what as a non-negotiable. If you want to figure it out any other way, great, but you've got to get to the result. Because you can't say we're not getting to the result. I think we're going to see some more of that kind of behavior as well.

Magnus Lejelöv: Wow. I have so many follow up questions, but for this podcast we have a format where we start with four questions, and we need to have those four questions as a start. So that's good. The fourth start question is, tell us your best story as a patient or looking at a patient from some perspective.

Kaveh Safav: Absolutely. Unfortunately, my personal experience has been dealt with lots of family and friends who have gotten stuck in the healthcare system, and I've had to navigate for them, including recently. And one of the things that strikes me right now in dealing with one of my

family members who has a relatively complicated illness and a relatively unusual complication to a set of medications is that we have great clinical science coming through specialists, but the system still doesn't allow anyone to talk to each other. And it turns out that ultimately the only real care coordination is occurring through my relative's spouse who's the only person in the room who has to literally talk to each doctor and then go back because the doctors will say conflicting things and bring the doctors back in and say to them, wait, you said don't do this. They said, do this. What is the right answer?

And one of the concepts that we talk about in the States often is that every patient has to have someone advocate for them in healthcare that's not the doctor. And despite the fact that we hope that our system is going to work, we still have defaulted to the only thing you can really guarantee for yourself for your best situation is someone watching your back that cares about you and holds it together. I wish that wasn't true. I wish that the system stepped in for it, but it's hard. It's really hard. And I think we're still at this place where there is a responsibility for the individuals and their families to keep an eye out for the process. Despite the fact that the healthcare system is well meaning, and all the individuals are well meaning, there's too much complexity in the system to trust that the system is going to find and put the patterns together. And I saw this problem when I started in medicine 30 years ago, and I'm still seeing it today, like right now as we're speaking. With all of the reforms and all the digital records and all the things that we've done and all the great science, my cousin wouldn't be alive if the science that we have today didn't exist. This wouldn't even be a dialogue, but it is, and we still have the same behaviors.

Magnus Lejelöv: Yeah. And it's hard to get equal care. The foundation is for us as individuals to help each other. It's a good story and I hope all will be good with your cousin.

Kaveh Safavi: Thank you. They always say that if you're a clinician, you don't walk in the patient's shoes, you don't understand it. You're just focused on your job doing a technical thing. And in some ways, we find some very interesting realities. In the States, for example, a fact that I find amazing, is the group of people who are least likely to use resources at the end of their life are doctors—probably because they have the best understanding of the relative futility of a lot of that care. And so, they just say no. Whereas most people wouldn't know that. It's a fascinating statement about what happens when you're the patient, when the caregivers become the patient.

Magnus Lejelöv: Yeah, that's a good point. We are now more than 20 minutes into the podcast. Can you tell us a little bit about yourself? What do you do for a living and how did you end up there?

Kaveh Safavi: I spend my time working with healthcare leaders and helping them figure out how you can combine both human ingenuity and the promise of technology to solve problems that can't be solved through just the normal way we used to do things. I'm a physician. I actually am trained and board certified in both the disciplines of adult medicine and pediatrics medicine. I trained in both specialties. I started practicing medicine, and I went to law school at night, and I actually became a lawyer, and I passed the bar. I never practiced law, but I got all the way through the process. And in that process, I met some people during my work that were actually building an organization to

run doctors' offices and bring modern capabilities like electronic health records and other things to that practice to create a more modern sort of next generation practice.

And they convinced me to join them. So I started to move away from full-time medical practice to a combination of medical practice and this business. Eventually the business was bought by a large health insurer, and I was asked to take on a full-time executive role. I haven't done patient care directly for 25 years, but I have now, in that time period, I've had leadership positions in both the delivery of care, so hospitals and doctor's offices, as well as the insurance sector. And about 15 years ago, or actually 20 years ago, I got recruited by an analytics company to help them build a set of capabilities to help primarily hospitals measure performance, clinical performance and other sorts of things. And from that business I got recruited by a technology company thinking about trying to get into healthcare through things like telemedicine.

I moved from the delivery system over to the technology side of healthcare, and then about a decade ago I got involved in pure advisory business. So not a product company. And Accenture is one of the largest professional services companies in the world. We serve very large organizations, governments, insurance companies, providers, life science companies. I'm a global practice leader. And as a result of that, I get to work with these constituencies all over the world, seeing the problems and asking the question, how do I take people and machines, technology and humans, and put them together to solve the problem?

Magnus Lejelöv: Wow. Sounds like an interesting job.

Kaveh Safavi: It is a fantastic job. I am so lucky to be here.

Magnus Lejelöv: And one question on your CV, you have the title Global Healthcare Lead. What digital questions did you try to solve 15 years ago? What were the biggest hurdles and the biggest opportunities and challenges?

Kaveh Safavi: Well, so 20 years ago, the biggest issue was largely measurement. We didn't know where we were at, so it was more of an analytics and a measurement conversation. And then I got involved as people started to think, well, how do I use communication collaboration tools to make care more location agnostic? Because we had learned that we could do business at a distance, right? We didn't need to be in the same room to do work. Well, that's true for healthcare. I've worked both in the measurement of care and how do you know you're doing a good job and how do you recommend something, how do you actually deliver the care on a technology platform? Think information and infrastructure. Those are both parts of my background. In my current role. I do both of those things because we're seeing them go on simultaneously. If you think about precision medicine or recommendations for decision support, those are really measurement activities, but making care location independent, hospital at home, that's an application of technical infrastructure and capabilities. And so I see both sides and I try to solve the problem thinking about both angles.

Livia Holm: I've got two things that I want to follow up on. One thing is your experience with working in analytics and

measure of performance for healthcare. One of our top four questions before on the podcast was, what are the top three measurements for evaluating healthcare performance and why? If you had to choose one. Now I'm interested to hear your thoughts on that.

Kaveh Safavi: Well, this question continues to evolve when we had no measurements at all; it was highly subjective. We needed to introduce what I would call traditional outcome measurements. Did somebody die who shouldn't have died? Did somebody have an error or a mistake that shouldn't have had a mistake? But our thinking has gone way past that. As that information has become available and people have started to adjust their practice patterns, we're now getting into a different kind of a conversation, which is more recommending what's the next best action? What's the next best drug? What's the next best test? That kind of a concept, which is a little different than a measurement of an outcome, but it's still an analytic question. And that has a biologic implication. We talk about precision medicine, next best medicine, but the next best action about a location or a test in many ways is a reflection of not only medicine, but a patient preference.

In fact, a patient preference, a clinician preference, and the biology all move together to answer that kind of a question. What's really interesting and challenging is a recognition that the answer may not come just from the patient's medical record. We increasingly talk about concepts like social determinants of healthcare. This means, do you have a ride, or do you have food? We've discovered, for example, in the US after a decade of trying to reduce readmission to a hospital, so discharge and readmission.

The first time we did it, we kept looking at the medical record for clues. Can we see if you're going to be readmitted based on what happened in the hospitalization? Turned out the answer is no. What's the best predictor if you're going to come back to a hospital? It turns out things like, do you have somebody to drive you to the appointment for the follow up?

That's actually what's going to drive it. Do you have somebody that's going to help you pick up your medicine when you need them at discharge? It has nothing to do with the doctor's judgment. And it became an interesting challenge because in our healthcare system in the States, we were actually penalizing hospitals for people who went home and came back quickly and the hospital said, "Wait, hold on. You understand that that has nothing to do with the care that we provide or any of the services we provide, but you're penalizing me?" And the policy question was, "I guess you're going to have to figure out how to solve that problem." Now that became complicated. What is happening now is the discharge conversation isn't simply just, this is your diagnosis, this is your medicine, it's do you have a ride? If you don't have a ride, can we arrange a ride for you? Not to go home, but to come back in a week to go see your doctor in an office, which has nothing to do with the hospital that you're at. Those are the kinds of questions that need to be asked and problems that have to be solved for. That's not medical record data, as an example.

Livia Holm: Right. And speaking of hospitals, you've mentioned a few times now the sort of location agnostic delivery of care as an important part of future healthcare delivery. And you mentioned now that this is something that you actually work with on a sort of day-to-day basis,

how to enable. How quickly do you think that will move? One thing that we speak a lot about in Sweden is the transformation of the primary healthcare system to also enable care in the home and so forth. But it's moving relatively slowly, I think. What are some of the keys to making this happen and why isn't it happening faster?

Kaveh Safavi: That's a great question. The technology capability is always ahead of adoption for a couple of reasons. The first is you have to figure out a payment model that shifts payment from a location that it's used to, to a new location. And most payment schemes are hard coded. In the States, for example, when we do hospital at home, the government insurance scheme doesn't have a mechanism for paying for care that's not in a hospital. Even though everyone knows it's technically possible, there's no payment scheme for it. That has to be crafted. The second is culture—comfort and culture. So, I'll give you a very specific example. We have a care model, well established, validated, safe. Some patients who come to an emergency room are seen and the decision to hospitalize them is made and they could be safely treated at home or in a hospital bed.

Okay. But the problem is the doctor making that decision is an emergency room or an A&E doctor, and they have no idea if they send the patient home, if the services are actually going to occur. They have a better idea if it's going to be in the hospital or they have more confidence. Getting them to have the same level of comfort sending the patient home as putting them in a bed in their institution, takes work. You actually have to show them and convince them that they won't be making a mistake, putting the patient in harm's way. That's another issue.

The third issue is that to send someone home is a logistically complex fact. You have to actually send equipment to the home, you have to help set it up, you have to provide services, you have to provide a combination of in-home services as well as telemedicine services. The companies that now do what's called hospital at home in the States, these early companies are logistical companies much more than they are care companies because a lot of moving parts have to occur. And so I think that what happens is that we prove something is possible in the lab, that gives us confidence, but the actual implementation of it in real life is contingent on the financials, on the culture, as well as on the logistical and technical capabilities to just get the thing done that we did in the lab. And all three of those have to line up for this to happen. We took advantage of it during COVID because we had forced adoption, right? You literally couldn't go in to see a doctor because of the risk of infection in many countries. That had a really interesting effect.

It allowed people to see that it was possible to get taken care of without being in the same room with a doctor, at least for some conditions. Patients started to get comfortable, but for a lot of doctors, the actual act of figuring out how to just simply have a conversation, like a video conversation with a patient, they knew it was possible, but they didn't want to go through the process of learning how to use the software. And then it became a reality that they had to, and we saw many examples of doctors who once they figured it out, then they were willing to use it because they had gotten over the adoption hump. And this is, the economist described this as forced adoption. We took a service that we knew worked, we forced the

adoption for factors that had nothing to do with the participants. And then we suddenly had both a patient who saw it as a better option and a doctor who saw it as a better option, both of whom had gotten over the learning curve. And then the residual level of telemedicine is higher than the pre-pandemic level because the forced adoption got us through two humps we would've never gotten through.

Livia Holm: Right. The pandemic has certainly accelerated the adoption of various digital tools. How much of this transformation that we've seen during the pandemic do you think will last over time? Are we going to reverse back to previous ways of working?

Kaveh Safavi: Well, I don't know the data on Sweden, but in the US the data's pretty clear. Pre-pandemic, about five, 6% of all visits were done at a distance, doctor in patient in different locations. At the peak, in May 2020, when everything had been shut down in the States for four months, over 50% of all clinical care was being delivered at a distance. Basically, if you didn't have COVID or a serious illness that took you to an emergency room, everything was being done remotely because it had to be done remotely. We're now at around 20%. We're let's call it four times higher than the baseline, but half of the peak. And it's probably going to settle in that number. Some disciplines like behavioral health have really made a movement and don't seem to be retrenching. Others have done significant retrenching for a variety of reasons. It's easier for the doctors, it's easier for the patients.

Workforce shortages—there's a pro and a con around the whole idea of technology and remote locations that your staffing can drive to.

I think that it's settling in at a number. It's certainly nothing like it was at the peak, but it's not going to go all the way back down to the baseline for the reasons I just stated. Patients now know what's possible and some of them won't give that up and doctors know what's possible and some of them won't give that up.

Livia Holm: Right. It's always interesting to speak to someone who works across various countries. What are some learnings from the pandemic in terms of changed ways of working and so forth and what's similar in countries, but also are there any differences that you can see?

Kaveh Safavi: Well, I think one of the things that the pandemic proved is some problems are too big to be solved by any single actor. And in a country like the States where we have a highly both privatized and fragmented system, it is politically very complex. A healthcare system that is largely not oriented through and organized through the government has a much harder time acting in concert. It requires a lot of voluntary actions, whereas healthcare systems that have a significantly greater amount of government influence either in the payment or the delivery, it was just easier to get the actors to work together. And it highlights the need, when everyone needs to work together, of the price you have to pay in a fragmented system. But I would say that the biggest residual effects of the pandemic and every geography is a recognition that healthcare systems need a level of resilience that can only come through digitization.

The ability to scale up services for virtual at a distance, and then to scale them back down as people could move. Every telemedicine business that we knew of did not have the capability to scale up as fast as they needed to.

And so what we've seen is every organization move their digital agenda forward because they recognize that resilience and flexibility, meaning you can't be a purely physical analog model. You have to have a digital and an analog model. So massive adoption there. I think that's one thing. I think the second thing that we're actually seeing that's a residual of COVID is that if we have a burning platform to solve a problem as a society, we can move much faster than we normally do. When people's lives are on the line, vaccines, testing, discovery, rollout, all of those things had a much more compressed time scale than many normal healthcare innovations. And that shows you that as much as we can complain about the slowness of transformation, if life and death is really an issue, we can go faster. Our challenge in every system is how do we keep that pace when we don't have an artificial life and death fear as the motivator for it because we know it's possible. We just have to stay focused on that kind of a transformation. I think that that's another big piece of what we're seeing.

Magnus Lejelöv: Good. Livia said that before we asked a couple of questions to all our interview subjects, and one of those was, what country in the world do you think have the best healthcare? So we have asked that question to like 40 Swedish people within the healthcare system. Now I'm asking you, if you were to be sick somewhere in the world, what top three countries or regions would you prefer to be sick in?

Kaveh Safavi: Well, you're asking me which of my children do I love the best? Which is a very careful question.

Magnus Lejelöv: Sorry.

Kaveh Safavi: It's an interesting question to answer because there's a lot of moving parts. If you were to ask the question, for example, just based on things like data, like let's call it the likelihood of surviving a serious illness in cohorts by ages, for example. You often find that the US tends to be at the top because of the generally widely available access for seriously advanced treatments. But when you get to issues that have much more of a public health measure, we don't do as well in the States and other countries that have a more of a public system do much better. For example, the Nordics have done a nice job of, in some countries, particularly of making more primary care available to more people, more easily. In the US, it's a hassle to do it.

And there's a lot of criticism about that. On the other hand, access to specialists is a lot harder because institutionally, many cases they're not available without going into a hospital. The hospitals are all about specialty care, very different models. I think these models reflect our culture in a sense and people adapt. When you look at people's view of their own healthcare system, I look at international studies and I see the same thing which is, everyone complains about their healthcare system and then defends it relative to everybody else's healthcare system, which is a classic kind of normal response, right? We all love the system we're in better than everyone else's, but it's a terrible system relative to meeting our needs. And so in my mind, I think it's the wrong question to ask, which is the best system? A better question to ask is, what do we need to do to make this system better?

Because there is no system to emulate. The biggest fatal mistake is the idea that we're all going to emulate an ideal system.

It doesn't actually work that way. And to put an even finer point on it, if you look for example at practice pattern variability by doctors. In the States, there's an orthodox in the US that one of our big problems is too much practice pattern variability, and it's all about our medical malpractice system, which is unique. Problem is that's actually not true. Practice pattern variabilities exist similarly in all countries no matter how they get paid for high doctor compensation, low doctor compensation, public fee for service, because it's actually much more about culture of training and how you train and the variability in the training than it is about anything else. So everyone has this theory, but the theory is wrong.

Look at the concept of affordability of healthcare. It turns out that in every rich country, since this has been measured in the 1960s, costs of healthcare grow 1 to 2% faster than GDP in every rich country, no matter how much money they spend per capita, no matter how private or public the system is. This has been an observation that economists have identified. And the reason is that the primary thing that drives the cost of care is the fact that human labor is the input, the biggest input, and wages always grow at the rate of the economy that the system is in because wages have to keep up. Scientific innovation causes diseases to go from not being treated by the healthcare system to being treated by the healthcare system. So when we develop a treatment for Alzheimer's disease, all countries will see a cost show up in their healthcare system, right?

And aging population, which is happening in all rich countries. William Beaumont started writing about this in the 1970s. He was a famous economist. He called it the cost disease. And he said, healthcare and

education costs always grow faster than GDP because of the labor dependency plus these other two factors. And nothing will change that unless we figure out how to substitute technology for labor, which isn't happening in any country. So I tell this to my American counterparts. "We know famously that the UK spends about half as much money per person as they do in the States. Which countries do you think are having the greatest increase in healthcare costs? And they go "US," and I go, "That turns out to be wrong. Actually, the rate of increase in the UK over the last decade is higher than the US even though they're spending half as much per person" for the reason I just described to you. So why would we want to adopt this system if our goal is to have the rate go up slowly? And we have no evidence that that's true. The answer isn't found by going to a neighbor. It's what is the problem that we solve? So I have come to the conclusion that we have more problems in common to solve, rather than borrowing models from each other.

Magnus Lejelöv: Very good answer. So I keep on asking the question then. If you ask the Swedes, what system do you like the most? Two systems stand out. It's the system in the Netherlands and it's the NUKA system in Alaska. Any thoughts about why Swedes tend to look at those two systems?

Kaveh Safavi: Well, I think that's a general reflection of the high emphasis on a basic primary service that's orchestrated and governed in a kind of a national way. But there are plenty of people that love the freedom and autonomy of a system where if you have enough money, you can buy your access to whatever you want. It all depends on our concepts of what social correctness is. The balance of the interest of society as a whole versus the balance of individual rights is fascinating.

Can I give you an anecdote that illustrates how complicated this is? Okay. I had a fascinating experience about four years ago. I'm in the UK watching the court decision around a boy named Alfie. This was a famous case of a child born with an inborn air of metabolism, basically on a ventilator, in a persistent vegetative state. NHS deems the care is futile, wants to turn off the ventilator. Parents who are very religious and believe in miracles, do not. In this particular case, essentially the parents have to go to court to keep life support on. In the United States the exact opposite is true. And we're a country that in theory has a lot of commonalities to our British brethren in terms of our heritage. In the US, the default position is life support stays on. And if you want to turn it off, you have to prove beyond a reasonable doubt and maybe go to court to turn it off. Otherwise, it is staying on. Here you have a situation in the UK a similar country, similar culture, where the exact opposite is true.

This is a very powerful statement about cultures and attitudes about individual rights versus social rights and the balance of who's in charge of deciding the allocation of resources? Who gets primacy over this issue? If it's a question about futility and the interests of the whole versus the belief in miracles, who gets to decide that? This is not a healthcare question. It's not a doctor question, it's a political question. It's a social question. And I often think that it's a mistake for us to think that this is a delegated question to the delivery system. It's not; it's a values question that rises above that.

Magnus Lejelöv: That's a good anecdote, definitely. And it's interesting to see the different perspective into countries that we see. We see them as kind of similar, even though...

Kaveh Safavi: Exactly. We see them as extremely similar, and yet they've reached completely opposite conclusions on a very critical question.

Magnus Lejelöv: That's true. One other thing that we talk a lot about in Sweden is health data and I guess that's what we talk about everywhere. We talk about four big companies—Google, Facebook, Microsoft, and Apple—and what they do with data, and especially that data is in the US and it's a big sea between us. How do you talk about health data in the US and what do you say with these big actors in play? Do you think there will be differences in the US compared to Europe when you talk about health data?

Kaveh Safavi: I think one of the issues that sits behind that question is the concept of data sovereignty. Like does citizens' healthcare data need to stay in their four walls and who touches them and who has access to them? And actually, there's remarkable similarity in every country in the world, which is that our healthcare data for our citizens must be protected. That includes its residents and who has access to it. And I think it becomes a challenge for global technology companies to operate in a world where the data assets for healthcare by their very nature will always be considered a sovereign asset. And so you're starting to see these big technology companies who see the opportunity to grow outside the US have to try to confront this. And they confront this through several kinds of approaches. One of them is, let's call it an architectural approach.

An architectural approach is the data for your citizenry will only reside in data and servers that sit within your border. It's never going to leave your borders.

That's sort of simplistic. And then they go, "Well, but who can touch them? Can Americans? Can a court?" It's just been an issue in the UK/EU, right? Can a US court subpoena a US company to provide data about a foreign national because it's physically capable of that? This happened in the case where the terrorism court in the US says, "I want to know about a person in another country" and they're forced to comply even though it's not in the US. That's a complicated issue. You can offer, let's call it technical solutions, that would say it's impossible to actually give you an answer without the cooperation, the technical cooperation of another party. But then that gets us down to a, I don't trust any of you to be honest about your technology. And everyone doesn't trust that the tech company hasn't built a back door or a legal compliance mechanism. The interesting point of this is that for any technology company that wants to be global, no matter what country they start in, to be in another country, they have to address sovereignty. What we're seeing increasingly in healthcare is a realization that you will not be a relevant actor and a provider if you don't have an answer for the problem of sovereignty, a technical answer, an architectural answer, a political answer. You have to solve all of those problems.

Livia Holm: And something else that you have touched upon a little bit is sort of prevention measures or personalized medicine. Of course, using data and tech for meeting the increased demand on healthcare with aging populations and so forth. One key to that that we often talk about is enabling people to do more for their health and preventing illness in disease. What do you think is needed to accelerate that transformation? You talked about the culture of, when you're sick, what you actually care about is being healthy,

but what you get is going to a doctor. How can we transform the ways of tackling that?

Kaveh Safavi: There's definitely a common orthodoxy that says if we could prevent illnesses, then we would reduce illnesses. What's interesting about that is that's somewhat true and not true because the natural history, the ability to actually know with confidence that you can prevent an illness from happening is not as high as people would like it to be. And the factors that drive to that include genetic factors that we may or may not understand. Socioeconomic factors, environmental factors, behavioral factors, there are so many, and they all interplay. It's not like everyone do this one thing and you're going to prevent this from happening. I think that we seek out to do as much as possible, but a lot of what we talk about is true prevention. True prevention is really outside of the realm of the healthcare system, and if we were serious about it, we would have to take seriously a whole bunch of other issues, some of which would really get to very fundamental social questions.

That being said, we do know that at least some, to the extent that human behavior is one of the inputs, we do see the role of technology in giving people the tools to augment, influence, deflect human behavior. And that becomes a useful path. The challenge is, in many cases, we don't actually even know what really causes a disease, so we get frustrated. A lot of people get frustrated because they engage in a lot of activities, and then we don't really know if it mattered or not. We can't give people the level of confidence to know that it mattered or not, but that's true about human life in general, right? We all go about our day doing our best to prevent bad things from happening, knowing that at some level we don't actually have any control over that.

It's some random thing that's going to happen. I think with healthcare, we have to get to that same place as a recognition that we do the best we can, but we can't give people certainty. That's important because the healthcare system still has to be built to recognize the fact that for all of the advances we've made around prevention, the total consumption of healthcare services has gone up. It's really interesting, these a hundred-year studies show that if you use life expectancy as an outcome, public health measures have the greatest impact. Not any healthcare stuff, right? But if you're thinking about treating a disease that is noble that you're going to die from, there's no amount of public health that solves that problem. And when we convert a disease that people die from to one that we can treat, a cancer, a neurologic disease, we've basically moved something on the ledger from a social problem to a healthcare problem, and all of its costs have moved over. And so we say, I don't understand it. I'm spending all this money on prevention, but my healthcare costs are growing. Well, there's not a relationship between those two, they're two different factors that are driving that.

Livia Holm: Right. Another topic that we've touched upon a little bit is culture and the relevance of that for transformation. And also, if transformation happens sort of automatically because it has to or not. I'm curious to hear your views on the importance of leadership in the healthcare system and what successful leadership looks like?

Kaveh Safavi: I think this is a fantastic question, Livia, because transformation of the healthcare system will not occur without leadership from the system itself.

As much as I said that demand gets created by citizens, that's not going to change the system. That's a signal to the system. But the real change is going to come from leaders. And I think that what we have is a fundamental challenge because the real currency for healthcare historically has been a do no harm currency, which tends to emphasize what I would call an administrative mentality toward healthcare. Make as few mistakes as possible, keep the processes as controlled as possible, but that doesn't get you to transformation. In order to do transformation, you have to actually reimagine an outcome and take some risks about what must be true.

Let me give you an example. I'm going to give you two metaphors that both connect. The first metaphor is, if you think about a sports team, the difference between the job of the coach and the job of the owner. The coach's job is to do the best they can with the players on the field. The owner's job is to decide whether or not they're going to get new players and a new coach. The coach can't get new players. A lot of what's happening in health right now, the leadership is coaches, but the problem is we need the owners to step in. That's one of the fundamental metaphors is that the owner mentality has to preside... I'm going to change the nature of this team, I'm going to change the nature of the players, the coaches, because I want to get a different outcome.

Consistent with that is what we see happening when you look at businesses and industries that have gone through very large-scale transformation, huge shifts. In our current lifetime, entertainment and media, going from physical media to streaming media-like vehicles, all kinds of big shifts that have happened.

Typically, what you end up seeing is an iconic leader who has a strongly held belief about a view, a vision in the distant future, 10 years out. It's a strongly held vision. It is not a vision that you will get to through a linear extension of what's happening today. They start with the end in mind, and then they work backwards. And they generally start by saying, what must be true to accomplish that reality? And they begin to put those in place and iterate toward that. If we have an imaginary healthcare system of 2040, for example, it's not a linear extension of the way we do it today. It's a big difference. We're going to have to have people that say, I know what we're doing today, but it's just not going to look like that. I'm going to make up something as an extreme example just to show you. In many countries, we're not going to have enough nurses to staff hospitals and nursing homes. We're going to be like the Japan problem, and maybe worse, where there's just not enough humans and we have to have a mixture of humans and physical robots to do this work. And in that case, we're going to have to solve this problem in a different way. That's going to require leaders that have a strongly held conviction and work toward that conviction, not incrementally operate their business.

Magnus Lejelöv: We have so many questions in our heads right now, but thinking about our listeners they have been listening to us for an hour now. When entering this room, this digital room, did you have anything in mind that you have not been allowed to talk about or that you think you want to share with the Swedish listeners?

Kaveh Safavi: Well, I think I've talked a long time. So I really appreciate your opportunity. I do think that the most important point is the point I made before, which is there are lessons to be learned, but not necessarily systems to be copied.

Magnus Lejelöv: And that's a very good lesson for all of us. We like to steal with pride, but you need to steal the right kind of things and the right parts and bits of different systems and not whole healthcare systems. But then I would like to thank you Kaveh for this interesting discussion. Thank you, Livia, as always. And thank you to all the listeners too. Let's go out and change healthcare to the best!

Kaveh Safavi: Thank you.