Talking Pop Health
Episode 6: Dr. Rishi Sikka on the crossroads of technology and pop health
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Eric Tower: Welcome to the Thompson Coburn Podcast series Talking Pop Health. I'm Eric Tower, a health care transactional attorney here at Thompson Coburn. Our last speaker was Dr. Sadhna Paralkar, Senior Vice President and National Medical Director at Segal. In that Podcast, we discussed onsite clinics, wearable devices, wellness programs and medical management program design. Today I have with me Dr. Rishi Sikka from Sutter Health.

Rishi, welcome to talking pop health. To kick things off, why don't you start off telling us about your career and a little bit about what you've done.

Rishi Sikka: Okay, great, thanks Eric. It's really wonderful to be talking with you and to have this opportunity to reflect. I actually did not start my career in health care. I actually started out in business and did my undergraduate work at The Wharton School at the University of Pennsylvania and while I was going through my program there. The kind of classes that really interested me when I was at Wharton were my classes in health care economics and health care management. I thought that the best way for me to be able to have an impact in that industry might be by going to medical school and by becoming a physician and being able to really combine these areas around both business and medicine. So at the very last minute I had a change in career path and was fortunate enough to get a partial scholarship to go to medical school at the Mayo Clinic which proved to be a really wonderful experience for many reasons. One of the interesting things about the curriculum at Mayo is you actually get about 5 months off in your third year to do anything you want and ended up spending those 5 months in Atlanta at the Prudential Center for Healthcare Research.

That was actually an opportunity for me to get my first exposure on data and analytics and learn how to program and do statistical analyses. It was also my first exposure to disease management. After medical school, I did an internship in Internal Medicine at St. Vincent's in New York, did an emergency medicine residency at Boston Medical Center, formerly known as Boston City Hospital, stayed on as an attending in Boston for about four years and then ended up going to Advocate Christ which is a level one trauma center on the Southside of Chicago.

I ended up working in the emergency department and very fortunate to go through a series of progressively increasing management roles, first around quality improvement in the emergency department and then around quality and performance improvement for the hospital and then taking on a role at the system level for Advocate Healthcare where I was at the enterprise level for 6 years, the last three as Senior Vice President of Clinical Operations for the organization. I've been with Sutter Health now for three years and very different experiences and very different roles.

Eric Tower: Oh, that's great. You have a truly impressive background but you already know that. Why don't we talk a little bit about what you're doing with Sutter and Sutter's approach to population health? What sets Sutter kind of apart from everyone else?

Rishi Sikka: In my role at Sutter, I'm president of System Enterprises. I oversee a portfolio of businesses that represent two things. One is that they care for patients, particularly in non-traditional ways across our geographies, servicing our Walk-In Care clinics, our home health and hospice operations and our ambulatory surgery centers.

There's business lines I oversee, which is all of our work in mental health, pharmacy and lab. In all, it represents about 1/3 of the operations of the organization. About a year ago or so we decided to stand-up a new division and that is referred to as Sutter Population Health Services. We recruited our first Chief Population Health Officer for the organization. He started with us in February of this year.

We regard population health or population health management as the clinical infrastructure that supports high quality, cost-effective care with appropriate utilization in our managed care populations. If you kind of break that operational definition into pieces, you know we have a target population there. We're talking about our patients who are in manage care agreements. I think particularly, capitated agreements for us. You're talking about the what – the what is sort of a clinical wraparound and then you're looking at a target state which is great quality and appropriate utilization.

Eric Tower: Well, you're covering a lot of ground. I just want to go back and figure out a couple of things that you said. First of all you referenced capitated agreements. By that, do you mean that you're taking full cap for a large portion of your patients at this point?

Rishi Sikka: We're not taking it for a significant portion of our patient population. I'd have to go back and look up the number but we have basically either full capitation agreements or just professional capitation agreements on the professional side of the business. Overall, it is at this time not making up a majority of our business in that regard, but still it is material and something that we need to continue to develop, the ability to successful execute on.

Eric Tower: Is the plan to go full cap?

Rishi Sikka: I think that we had established a 10-year outlook that we need to continue to move a greater portion of our reimbursement into value-based care constructs. It isn't necessarily all just cap, it can be some ACO-insured savings construct. It can also be bundled payments as well. But probably a good portion of that is going to be in sort of capitation.

Eric Tower: Right, so you're on the beginning of the journey as it were?

Rishi Sikka: Yeah. The organization has a deep history being in California from quite some time ago of having being pretty deep in this world and then that kind of probably rattled, I think, in the 90's around the market focuses in that HMOs were not really regarded that well and people wanted more open based networks. So I think we're kind of coming back around again.

Eric Tower: When you talk about some of the interventions, we talked about specific – or you generally referenced I should say, mental health intervention. Are there anything in particular you're doing there?

Rishi Sikka: Yeah, in the mental health space, we have in one of our regions a partnership with an organization called Quartet. You can sort of think about Quartet as an open table sort of setup for mental health services. When a provider, particularly a primary care provider has identified a patient as having a mental health need then they can actually use this platform to help connect them with a provider in the community, a mental health provider in the community to set up referrals, set up appointments, determine pieces around insurance and payment as well. So that's been pretty useful for us to be able to at least have a platform that establishes that connection and continuity particularly in areas where we don't have the mental health providers that are part of the organization where we really need to connect more to, to independent providers or individuals in the community.

Eric Tower: What are you doing around the social determinants of health? Another you mention being --

Rishi Sikka: Yeah, that's where I think some of our work is a little more nascent. As our Population Health Officer, he's been about 8 or 9 months in the role, is scaling up, this is going to be a big area of focus in 2020. I think we are looking for a similar type of platform solution as well where we can better, once we have identified that there is an individual with a need, that we can connect them to those resources that might be in the community and do those kind of warm hand offs. I think that's the work that we're looking to do in that regard.

We also want to make sure that we're directing our community benefit in a very target way - to those things that we think can impact the

social determinants of health but we have more work to do there. I would say that even though I use that term and it's kind of like industry lingo, my take on social determinants of health is that it's a bit of a euphemism for things that are very hard for us to discuss and hard for us to talk about.

They are ideas such as hunger, homelessness, unemployment. If you start to fuse those words right they're I think much more meaningful than a very broad based euphemism around social determinants of health. I'll sort of get off the social determinants piece for a little bit, but the other thing is I think there's a lot of misunderstanding there around the social determinants of health and who it impacts.

Eric Tower: Yeah, definitively. Has there been anything that has really leaped out at you since you've been at Sutter that you say "wow, here's something we need to address" or maybe the flip side is "wow, here's something that we're doing that's particularly successful"?

Rishi Sikka: One of our living laboratories for population health has a very long standing PACE program. PACE stands for Program of All-Inclusive Care for the Elderly. What is it, and this is a federal program, where we take full risk on an eligible population of Medicare/Medicaid patients. So they're dual eligible Medicare/Medicaid. We take full risk so we're essentially acting like the insurer and we provide their care. We have actually two or three dedicated centers for this population here in Sacramento. We actually have a joint venture with another organization where we built a pay center in the past year in Stockton, California and when you have that full risk or a dual eligible population, the types of services we provide in the Center are really holistic and really true to this issue about the social determinative health.

For instance, at this pay center that we have we provide a gym and physical therapy and occupational therapy to get strength and conditioning. So that they don't have falls in their homes. We provide meals on wheels. We provide a laundry service and we have washing machines and dryers so that they can clean their clothes. We actually have a beauty parlor, too, actually in our Center so that it's not just about if you look good, you feel good, but also just to attend good hygiene and good nail care and foot care which is important in people who have diabetes. It's a place where people – actually we provide socializing and recreation and games and activities because of loneliness, being lonely and being by yourself is such impact on the medical aspect of care. This model of holistic care really speaks to the fact that 20% of a person's health is the medical care, 20% is genetics and 60% is everything else. So we're tackling both that 20% that is the medical part and then the 60% is the other. It's a really, really cool program that we've got and its full risk.

Eric Tower: Wow, well that sounds great. How does your geography affect your ability to provide pop health? You're a big system. Sacramento

obviously being the core, right? Do you find it harder to provide pop health in areas as you get away from the core? What are you seeing there?

Rishi Sikka: There's a couple of things that are different in this organization than in others. We are a large organization and although we're pretty much based in Northern California for the most part, and that spread of Northern California is pretty broad. It's definitely pretty broad just from a pure sort of measuring the miles between places standpoint and then it's even worse when you think about the traffic particularly in the Bay Area geographies that we are. So that's definitely one aspect of the challenge.

The other piece that's a little bit different from other states, in California you cannot directly employ physicians so the relationship between our physicians and the organization occurs through a foundation model. Which is that, we have a medical foundation that has a contractual relationship with an aligned medical group for the provision of services. So there's a bit of a, sort of another piece with respect to working with our physician that is not present, I don't know if there's other states that have this model, but California is certainly the most well-known for this and I know that this is not a model that's present in other states that I've practiced in. It's not so much the geography, it has some challenges to it but probably the foundation is a piece that, definitely, I found, coming here very unique and very different from anywhere I've been.

Eric Tower: Given your background in the data area, why don't we turn kind of take a little dive there because in an area that fascinates me at least, and talk about how you get your data, what sources of data you use and how do you collect it at the outset?

Rishi Sikka: In some respects we're actually kind of building some of those data pieces here at Sutter and working on it. If it's okay, I'll sort of at least speak to some of the pieces that are high level. When you're doing data and analytics in population health there's really three things that you want to know or three things that you're trying to work on. First, you want to know what your current state is. What's going on today in your population? Who are your attributive patients? Which of your attributive patients are in the hospital? Which are your attributive patients are in the E.D.?

So your data analytics really need to be able to first be able to answer that question about what is the current state. Then when you know what is the current state, you need to be able to ask is the second order of question, what will be the future state? Who will be admitted to hospital? Who will be readmitted to the hospital? Who will have an acute event? Who is at risk of deterioration in their chronic disease? So you start with understanding their current state and then you go to trying to understand the future state prediction and then the third piece is that you want them to be able to intervene. You want to be

able to intervene on something that you anticipate, that you predict that will occur in the future. You want that intervention to be built into the clinical workflow in a way that can be meaningful and impactful and then prevent the thing that you were anticipating. So it's current state, future state and intervention. That's really where I think you want to build the data platform and analytic platform to be able to do all those three things, understand analysis at the current state, prediction – that's future state and the intervention which is building into clinical workflow to make a difference.

Eric Tower: So how do you go about doing that? You've got millions of patients. You can't micromanage the care for each one. Obviously they have physicians, there are other clinicians involved. You can't just simply have a computer give everyone a care plan. But by the same token, I assume you want a standardized certain processes and you want to make sure that best practices are being shared. How do we even begin that?

Rishi Sikka: I think the way that I've sort of represent exactly what you said is that everybody needs something but everybody can't have everything. If that makes sense. It's really important to be able to stratify your population appropriately by risk, depending on what it is you're looking at. If you're looking at risk of hospitalization, risk of utilization, it's really important that you develop some kind of segmentation or stratification scene. And even individuals who are in the "low risk" probably need to have some kind of baseline check-in or intervention going on and then as you sort of move up the pyramid, if you will, of risks, stratified risks, that the intensity of the intervention increases.

Eric Tower: Do you start off saying we're going to focus on diabetes and come up with a plan for everyone who has diabetes or how do you go about that?

Rishi Sikka: You could, if you wanted to sort of, take that example, you could look at the individuals who are in poorest level of control with respect to their chronic disease and already doing that, you kind of stratify the population and then you could sort of intervene on the ones that are, in the case, have the least degree of control. The thing people would extrapolate about, and I urge a lot caution around, is when they start to do the stratifying on the basis of cost.

People can, and it's replicated in study after study, that there's this relatively small proportion of the population, somewhere around 20% that accounts for a disproportionate share of cost. Somewhere around 50, 60 plus percent. What folks end up doing is they end up focusing on that 20% thinking that that will impact the 60% of costs but it doesn't really work like that. And this is where a lot of caution has to occur when you're doing risk stratification particularly on costs because a good portion of that 20%, they will what we call regress to the mean. They may be high cost in this period but a significant portion of them in the next measurement period you look at using on

an annual basis will be low cost or below the means. And the reason why they regress to the mean is many people in that high cost group experience a transient event that causes them to become high cost and then when that event goes away, they go back to a baseline state. Somebody could be high cost because they had a major trauma, like a major accident. They could be high cost because they had a discreet diagnosis of acute illness, like malignancy, and once they hopefully get beyond that, their cost structure regresses. You got to be really weary of this sort regression to the mean phenomenon. It's definitely an issue that plagues doing risk stratification and you have to be really mindful when you do your analytics as well.

Eric Tower: Can you do risk stratification targeting certain conditions knowing that it's sort of a one way street or do you find that regression of the mean is sort of, you know, occurs across the board?

Rishi Sikka: Regression of mean pretty much occurs across the board for the most part so what you need to do is look at individuals that are persistently high cost. That are persistently poor controlled. That are persistently having hospitalization period, over period, over period. That helps eliminate the regression to the mean effect. I hate to say it but sort of the proof point here is that most organizations kind of in our industry, they stratify by cost but they're not doing very well in the sort value based constructs not on a monetary basis. There's a lot of reasons why. One is the investment that's made. But the second is that there's so much regression to the mean.

Eric Tower: Why wouldn't I just simply target someone who has a particularly condition, know that it's chronic, let's say diabetes and I just don't want them to deteriorate and that's my strategy for value based care. It's not hey, when someone's really sick and they've been in the hospital a bunch, I already know they're in pretty bad shape but someone who has just been diagnosed with diabetes, the earlier the better, the sooner you intervene maybe the less they deteriorate.

Rishi Sikka: No, I think that's definitely a valid part about the risk stratification. No disagreement there.

Eric Tower: How do you determine what interventions to make? What's the process that you go through?

Rishi Sikka: So in general however it is you decide to determine the risk level of an individual. I think the higher the risk the more the intensity of the intervention, the more frequent the contact, the more the human touch component to it. The greater, frankly, the resource thing that is associated with it. Just to go back to this example with the PACE program from earlier. One of the things they do because you're essentially dealing with a population that in many respects, many of the individuals are all high risks. Every morning at the center, they go through every day, every single day, they go through every patient that's hospitalized, every patient that's been in the E.D. and

everybody's at high risk. And they spend that level of time in their case conference every morning to go that deep.

Eric Tower: Let's go back to the PACE, that's obviously a geriatric population, have you create geriatric pharmaceutical guidelines because the elderly respond to medicines differently than many other people. Going into people's house and putting in handrails, how are you acting on those interventions?

Rishi Sikka: In the PACE program, they do make home assessments and check the environment of care. One of the big things about PACE is that we try to keep patients in their current living situation as long as possible. So they do do those assessments of the home environment. We provide transportation for them. Not just to and from the Center but to their doctor's appointments. So it's very, very holistic in terms of what we do. In a traditional fee for service kind of construct, those kinds of investments strictly speaking aren't reimbursed on a transactional basis. But when you're taking full risk on a dual eligible population, making those investments so somebody doesn't fall and then break their hip and then land in the hospital and then land in the operation room and then in rehab. I mean like, it just aligns so well.

Eric Tower: So what are some ways payers of health, employers, you know, advance in population health? With your background in data and data science, what do you think artificial intelligence is playing in the practice of medicine and certainly in population health? Do you see it? How are you experiencing it?

Rishi Sikka: It's really generous of you to say data science, I don't probably think of myself, I probably wouldn't go that far and I think true data science would cringe on my credentials versus theirs. But right now I think that artificial intelligence on this clinical aspect has, I'm not as super close to it in that regard. I think that it probably still has some further steps to go to work on the clinical side of things. Artificial intelligence can be used very broadly where I do think that there is a lot of value and that has been an experience in previous work as unique as using machine learning to look for patterns in data to establish predictions. That can be encoded and models. I think that has a lot of value and that is a lot of work – is great. But I think true artificial intelligence where it's actually probably scanning the information and then intervening in clinically meaningful ways, I think it's still a little bit off in this particular area.

Eric Tower: So you're talking more about predictive analytics then?

Rishi Sikka: Yeah, for sure.

Eric Tower: How has that affected you? How do you utilize predictive analytics to help guide people's care?

Rishi Sikka: I think a great example came from my time at Advocate where we built, at the time, was one of the best models to predict readmissions in patient populations. After building this model which had all these variables and continuously scored patients while they were in the hospital, that individuals who were at high risk at some of our hospitals got specialized discharge, specialized follow-ups, specialized resourcing afterwards to intervening, to prevent readmissions. So I think it was a really great example of some work that we had done.

Eric Tower: And are you planning on doing anything like that at Sutter, of course?

Rishi Sikka: Absolutely. Absolutely. We're putting together under our chief population health officer and our health plan our strategy on the population health and analytic piece for sure.

Eric Tower: Excellent. Anything to do with disease registries or any of that other stuff?

Rishi Sikka: We do have a registry tool that's homegrown and built that looks at actual performance I believe particularly quality indicators in our ambulatory population. So that's one piece that we have here that seems to be working pretty well.

Eric Tower: How are you knitting, it sounds like you're responsible for ambulatory there, generally, among other things. How are you knitting the ambulatory in with the inpatient?

Rishi Sikka: I oversee several of our, what people might call like asset light businesses like walk-in clinics, surgery centers. Certainly we're looking to in our walk-in clinics, I'll use that as an example, is a retail clinic that in really retail accessible areas with a fixed menu of services at a defined price point that you can easily get services. A very different field than a traditional physician office or medical office building type setting. We're looking at using this chassis now as an ability to potentially provide disease management for certain patient populations. We're looking at a pilot about being able to do pre-op physicals in this environment for our surgery center patients so we are looking to be a little bit more expansive in how we're using some of these assets. One of things we're seeing in our ambulatory surgery center portfolio is that the complexity of the types of cases that we're seeing is increasing. We're doing joint replacements now and anticipate that with CMS that we would be able to hopefully do some more of that in 2020.

Eric Tower: So you see a lot of activity around people wanting to do consults over their iPads or anything like that? Are you thinking of going that direction or you putting most of your work into the AFCs and the --

Rishi Sikka: No, one of the areas that's in the portfolio is that we do offer virtual visits for a variety of conditions, acute conditions and we're looking to

spread that virtual visit portfolio to primary care and to other specialties. We do have a pilot that we will be expanding in the organization of a full virtual practice. We do have a primary care physician that happen to be based out of the Bay area, though they could be based anywhere and they care for a fully capitated population and they do that entire care, their entire primary care for them, virtually. And that has been, we have some analyses going on right now about the effectiveness of that type of care model but certainly preliminary results and certainly the anecdotal feedback from our patients is that they really like that. It's an on-demand primary care from anywhere you are, that we provide 100% virtually.

Eric Tower: Wow. Is this offered through an insurance carrier or are you doing this directly outside of insurance? How does that work?

Rishi Sikka: We have our own health plan. Sutter Health Plus. This is a benefit that we've offered for a portion of the Sutter Health Plus enrollees.

Eric Tower: Is that bending the cost curve?

Rishi Sikka: So that's the part of the analysis that are happening right now. Just to be able to verify and validate that. And you know why the reason, again, that analysis takes a little bit of time is you want to protect against this regression to the mean effect. So it's not --

Eric Tower: Exactly.

Rishi Sikka: -- so that we know we really are bending the cost curve.

Eric Tower: Okay. We'll that's fair. It sounds promising to say the least. I guess we'll have to read about it.

Rishi Sikka: It's very cool. And the funny this is like the whole practice is virtual and like a very, very small number of patients have asked to actually see the physician in person to see if she was real. Because they're always interacting with her virtual, right. And then they find out that she's real. They're like really just want to see you just to see if you're real. And then they'll come and they'll be like oh yeah you're real. It's pretty cool.

Eric Tower: Yeah that is cool. How do you – and this has to be a big deal to you, how do you insure consistency in care? If you're relying on a lot of stratification and data, the differences must be kind of hard to accept, right?

Rishi Sikka: Yeah. I think that's a great point, Eric. I think the important thing is that you strive for consistency particularly with respect to standards but I do think you have to be respectful of appropriate variation that needs to occur because of either the setting, the environment or the patient. It's not an either or, it's more of an "and" that you've got to balance. You've got to balance both the need for standards and the

need to have some at times acceptable variation so it's not – I don't really see it as an either or and I think it would be probably unfair to.

Eric Tower: So how do you differentiate the good and the bad?

Rishi Sikka: Here's what I kind of find about the good and the bad is to understand why. Why is there a piece of feedback or response contrary to a standard and to really engage in some authentic listening as a leader to understand why as the first step. I find that when I do that or when we do that or our teams do that, there's a rationale there. It's not capricious. It's not about that change is bad or there's a loss of autonomy which may all be true and it's not to diminish the impact of those but I do find that not too infrequently there is a really good reason as to why and to really be respectful and see what can be done potentially to accommodate that appropriately when you keep the patient's best interest in mind.

Eric Tower: This all leads to, I guess, the elephant in the room – that being engaging with the physicians. It's one thing to have a bunch of people with computers spitting out care plans but the physicians are a critical part of all this, how do you find it best to engage with the physicians and really keep the focus on the best interest of the patient?

Rishi Sikka: There's so many different models and structures and ways that you can go about that. I would say the common denominators in all of them is that you need to authentically involve physicians in the process. And when I say authentically, it means to be very much upfront. It means to be early. That it is understood that their time and that any decisions, conclusions or feedback that they give will have value and input into a process and that there is follow-up as well. I think when any of those pieces break down, i.e. you don't bring the physicians in early and it's after a project or piece of work has launched or is well down the road, that the engagement of physicians is not meaningful. That they're not making decisions, they're not providing feedback or there's no evidence about feedback or decision making is acted upon and then third, that there's not a meaningful loop of follow-up about what has been the results of their decision making, their coming together and their engagement. I find when any of those three over the course of my time in health care, when any of those three break down that's when it can be problematic. It also does require I think genuine physician leadership by physicians as well.

Eric Tower: Let's assume you have that, how does physicians respond to being told gee, maybe we need to go a different direction here? What have you experienced there?

Rishi Sikka: I think physicians have a real acute understanding of the challenges that are occurring in health care. If they happen to be within employed model or a lined model, I think they know that because they hear that from leadership and health systems. They see that if you

open up a newspaper or read the news every day and they quite frankly hear it from their patients too, about the cost of health care and probably access being another one. I don't think that they – I find that there is an acute level of understanding in the physician community.

Eric Tower: Let's turn to the patients. I just want to ask you, what role does individual responsibility play here?

Rishi Sikka: That's a good question and one that I think a lot of people ask and I don't think it has easy or discreet answers one way or the other. There's certainly a lot of organizations and companies out there that are trying to tap into aspects of motivation and changing behavior. Gosh, Eric, that one's a tough one. I might have to think about it a little bit more.

Eric Tower: Well, you mentioned all the social determinants so I got to admit you opened yourself up for that one. What do patients think about care coordination? Do they like it? Are they frustrated by it? What are you seeing?

Rishi Sikka: Over the years you know what I've heard, it's like that so many people are trying to coordinate their care, who's coordinating the care. You know what I mean. You've got a health plan that probably has care coordination services and is reaching out to patients and seeing how they're doing. You've got a provider office that might have a care coordination piece. You have a health system that might be providing a care coordination piece. All these people are sort of claiming or having that rubric of coordinating care but who's really generally orchestrating things and looking at that. That's one piece of feedback I've heard quite honestly, I've experienced that. I've experienced that in my family. Maybe not as much on the care coordination side but certainly on the disease management side where there's all these different groups like your PDM, your health plan, your doctor all think that they're helping to manage a chronic disease and we're trying to and I'm kind of left wondering a little bit about who is or who isn't.

Eric Tower: Kind of reminds me of those little disease management programs that some of the pharma companies used to do and it consist of a phone bank telling people to get their script filled and some mailings and obviously the only plan was to get the scripts refilled.

Rishi Sikka: That's right. That's right.

Eric Tower: So I can see where people might get a little overwhelmed if someone's bugging them just to get their scripts filled and then other people are bugging them about entirely different things. And the left hand and the right hand don't know what's going on.

Rishi Sikka: Yeah, that's right.

Eric Tower: Have you learned any particular lessons about patient engagement?

Rishi Sikka: Particular lessons about patient engagement.

Eric Tower: You know any tactics. Anything that does seem to be more successfully. Obviously you mentioned your PACE program, for example, and that's more of almost a lifestyle situation.

Rishi Sikka: You know, this is honestly an area, Eric, where I think we as an industry have a long way to go. I think we have so much to learn from other industries. I keep thinking about it. I keep wondering about it. But I don't think we've made a crossover of some of these learnings and understandings. For instance, why is a certain game or an app on your phone so relentlessly addictive? And why is it for some people consistently addictive like that and then for some it fades and goes? And what are the learnings and understandings for that? I think about the girls, my daughters, and they're like so into this like Tick Tock thing, right, and there's a lot of adults by the way who are into that. I don't know are you into TikTok? Do you have that?

Eric Tower: I'm not but I have one child in particularly who really, yeah.

Rishi Sikka: There's plenty of adults who I know who are into TikTok and I'm just like what if we could just challenge, whatever it is behind the whatever for that individual, be for lack of a better word, the addiction or the compelling nature of that app, what if that could be channeled into better nutrition. How could we bring that over? Another really great example, when we take it for granted rewards programs, like frequent flyer rewards or credit cards. The reason why those programs started and they're still around is that they are for a group of individuals successful in driving behavior. What is our rewards program as an industry? What does that look like for us? What is that thing that promotes retention, longevity, loyalty in a way that honestly, industries is varied as credit cards, casinos and airlines have all figured out and then the accompanying data and analytics on that. So I think we still have quite a bit of way to go to be able to tap this aspect of patient engagement.

Eric Tower: Well, you do see some of that with the employer workplace programs where sign up and you get $200 and then if you need additional help, complete this program and there's some sort of bonus but that strikes me as being more tied towards negativity than it is positivity. It seems to emphasize more, you've got something that we need to fix because you're going to cost us money rather than saying hey, you can do this and be rewarded for health behavior.

Rishi Sikka: And the other aspect of those programs, Eric, is there's a lot of well documented literature now that those programs are not effective. That they don't really drive change in aggregate and that the folks who do that whatever like the get your blood work checked, they were going to do it anyways. You see a lot of employers actually stopping those programs because they're not actually showing impact or an effect.

Eric Tower: Given your background with all the data and the analytics, how do you respond to someone who say's pop health, boy, it sounds like Big Brother. They trying to control every aspect of my life.

Rishi Sikka: That's an interesting piece. I think it's more, I would probably say population health really aligns to a mechanism of payment that is not traditional fee for service. When you have those incentives that are aligned and I think they actually require alignment with patients and then the entity that pays for health care as well as the deliverer or provider of health care, I think when that alignment exists and it's very transparent that then hopefully that kind of narrative gets significantly mitigated.

Eric Tower: What do you think the future holds in say the next five years in this field? Do you see any potential breakthroughs, anything really exciting happening?

Rishi Sikka: I think organizations are continuing to look for new and innovative ways for being able to deliver on this value proposition of great quality at a more appropriate point of cost and more appropriate level of utilization. I think it's fairly incumbent on the industry to figure out those approaches because I think one of the few areas I think of genuine bipartisan consensus in this country, although they have very different ways of wanting to tackle the problem, I don't think there's any doubt about that health care is "too expensive" and you sort of see that as common and honestly it's been a quite common area of agreement between the two major parties for quite some time so I think continuing to push the innovation and, quite frankly, execution and outcomes in this area is going to be even more important in the next couple of years than it was in the past five.

Eric Tower: Well, Rishi, I just want to say thank you for your time.

Rishi Sikka: Great. Thank you, Eric.