Primary Care Cures

Episode 78: John Sculley

Ron Barshop:

This episode is brought to you by the MediSearch Institute. What happens when patients cases become too complex to solve in a typical 30-minute visit? Well, we've all had those super thick, super deep patient history nobody's looked at in a long time and gone back through. Well, I'll tell you what happened is those patients bounce around from doc to doc without getting any answers or making any progress. These patients are trapped and lost in a maze.

Ron Barshop:

Well, MediSearch is here for those doctors and for those patients. Their motto is we solve the unsolvable. Their process is rather simple. Dr. Trent Talbot, the founder, assigns a team of medical detectives, typically three MDs and one PhD to each case. They research the latest breakthroughs and clinical trials and they elicit the opinions of 10 to 15 world-leading experts per case. They purposely seek out experts who will come at each case from a different perspective, the Bayesian method. Altogether, they will put in over 250 MD hours for every case. That means 500 times the amount of brain power that typical doctor can afford to offer. Nobody can do what MediSearch. Call 832-968-6667. That's 832-968-6667 to be in touch.

Ron Barshop:

You know most problems in health care are fixed already. Primary care is already cured on the fringes, reversing burnout, physician shortages, bad business models, forced buyouts, factory medicine, high deductible insurance squeezes the docs and is totally inaccessible to most of the employees. The big squeeze is always on for docs. It's the acceleration of cost, deceleration of reimbursements. I want you to meet those in this show that are making a difference. With us, Ron Barshop, CEO of Beacon Clinics, that's me.

Ron Barshop:

If you're a physician, the word PBM means little to nothing to you but in 30 minutes, you're going to know a lot more about them from an expert. That's a Pharmacy Benefit Manager and is a key part of the health care ecosystems represents about a third of the spend in health care today. When I talk about bigs in health care as I do a lot, I'm talking about big insurers, big pharma, big hospitals, big devices and big middles, which include brokers, retailers and PBMs.

Ron Barshop:

So big PBMs are the biggest of the bigs because they have morphed three giant categories together in the last five to 10 years. They are the BUCAH insurers, the Blue Cross United Cigna insurer. The pharmacy, there's two big ones we all know of and the middle men, the claims processor, which is what PBM started as. So PBMs initially existed to process our claim and negotiate between big pharma and the pharmacy, which is now one, that is PBM and the insurance company, which is now the PBM.

Ron Barshop:

So wait a minute, these guys are canoodling with their bosses and somehow getting us a good deal. Let's unpack that a little bit. If you negotiate a good deal with your boss and buying her car, that's unlikely. You're not going to get the best deal. There's a different pressure. There's a different system. There's different competition in place. It's the same problem here it seems but we're going to, as I said, unpack that today. And it seems like a ball of conflict of interest but we're going to unpack that today too. But wait, it might get even darker.

Ron Barshop:

The big three PBMs that dominate this field controls 76% of drug pricing. But wait a minute, there's three big automakers. Isn't 76% okay? Isn't that efficient? No. Because these big three price all drugs, not just their brand. So when Ford truck is competing with a Chrysler truck, with a Chevy truck, that's true competition but PBMs eliminate competition when they dominate 76% of the market and sell all the drugs. And pharma, as I said, represents a third of the health care spends. So this is a big, important ecosystem that's worth $940 billion of the $3.5 billion health care spend. That's a big topic.

Ron Barshop:

The hospital spend is a little bit larger than that so between pharma and hospitals, that's about two thirds of our spend in America. So this is important and my listeners now know that we spend double the health care spend of our next competitor on a per capita basis, which is Switzerland. Yet, if we're number one in that category of spending but we're not number one in outcomes. Instead, we're right placed between Croatia and Cuba. Now just as an example, Cuba's economy, their GDP is about a third less than my hometown of San Antonio, Texas. We have first world costs and third world outcomes in America right now.

Ron Barshop:

So I'm on a bunny trail, let's get back to the big three in the 76%. Let me lay them out for you. We've all heard of CVS and Aetna and there's also Caremark. That's 30%. They're the 800-pound gorilla right now in the PBM space. Cigna, we've all heard of that. But you've probably never heard of Express Scripts, same company that's 23% of the market. Optum, you've maybe never heard of but you've all heard of United Health and that's 23% of the market.

Ron Barshop:

And just to give you a size comparison, Optum is bigger than Microsoft in market cap right now. So Anthem, the fourth of the big BUCAHs we'll call them, has started their own PBM and Humana announced they were buying one back in November. So all of the five insurance companies now are PBMs or we can say the PBMs are insurance companies. And it's important because size matters in this space and it's a deeply personal issue to you and me. Here's why.

Ron Barshop:

My mom's boyfriend Elliot who is 86 years old took 19 pills a day. Pretty typical for the elderly to take 15 to 20 pills a day and that includes his nutraceuticals, that includes his pharmaceuticals. So your parents are likely on meds. Your kids might be on meds too and you might, too, be on meds. It's a part of our day-to-day life. 90% of the meds that are dispensed are generic drugs and

that was supposed to be the way we were going to get our costs down is using generics to replace the brands. But 60% to 80% of the cost in America are the branded drugs.

Ron Barshop:

So I'm going to repeat that step because it's kind of important to our discussion today. 90% dispensed are generics, yet 60% to 80% of the cost is the brand of drugs. That means a very small amount, 10% of the drugs that we buy are representing over half the cost. So that's interesting and just under half of us are on meds and half of those people are spending on two meds or more.

Ron Barshop:

So I just want to throw this data out there because we're going to talk about a lot of this today. And there's a famous study, how are we adhering to our meds and I think that's one of the problems that today's guest solves is adherence is going to go way up if we use the solution. But what adherence looks like on large studies that are famous are 50% adherents. The actual numbers are one in six are adhering to their drugs and maybe even as low as 6% are adhering to the prescriptions their doctors are giving them.

Ron Barshop:

So if we can solve that conundrum, we can make a big push forward in moving healthcare to where it needs to go potentially. That, again, is what our guest is going to be focusing on and one of the many subjects he's focusing on. So reducing costs and eliminating efficiency, those are all important to do. But I believe we have a lot of power and very few hands in the PBM market. And these companies that are getting bigger and stronger are supposed to show measurable consumer benefits and outcomes and cost, and I don't think we're getting that right now.

Ron Barshop:

So ScriptCo is a company that it handles all the e-scripting in America and they are owned by the big PBMs. They're owned jointly by all of them. So guess who they won't to allow in their e-script club? Amazon. They don't get to play ball. Does that smell like what's best for us? And there's 31 independent pharmacists that are closing weekly because the large PMs tend to eliminate the competition.

Ron Barshop:

So remember the big PMs are the pharmacy, are the insurance companies and sometimes they'll exclude these independents from preferred pharmacy networks. Sometimes they'll charge a different price for the drug so that it's not affordable for the pharmacy to make a living on selling that drug. So it's a money loser or they might get chargeback fees and they might not have access to what's known as 340b drug pricing, which we've talked on another show about.

Ron Barshop:

So the problem is massive and clearly right for a better way today's guest is that possibility. Everybody knows John Sculley, the former CEO of Apple and president of Pepsi and he's now chairman and CMO of RxAdvance, which is a healthcare industry's first cloud platform-based

PBM owned by Walgreens and Centene among others. So let's talk about this, John. Have I said anything in my intro that you would disagree with or that you do strongly agree with?

John Sculley:

No. I think you've given a great context for the discussion we're going to have.

Ron Barshop:

And I think what RxAdvance is hoping to do is to have 42 to 44 million customers. I guess that will be Walgreens and Centene customers that will be on boarded between the next two years. That's a quite an ambitious number.

John Sculley:

Well, I think that's a little aggressive. We think by 2025, we can be around 48 million lives, which would be about $50 billion of revenue with RxAdvance through our PBM business. But let me give you just a kind of an additional insight as how I think about the industry. The pharma industry is the largest spender of lobbying expense of any industry in the United States, $240 million a year. The second largest is the healthcare industry, $154 million a year of lobbying expense.

John Sculley:

So when you look at the US healthcare industry, which is around $3.6 trillion, the majority of that is chronic care it's over $3 trillion a year just on chronic care. And we are really a sick care industry. As you pointed out, about a third of the expense comes from the pharma ecosystem. And that pharma ecosystem is radically different from the world I come from. I come from the high tech industry where all of the big success stories in high tech have been a result of advancing innovation, which continues to drive down the cost of technology, which makes possible with the advancements of technology, incredibly new innovations.

John Sculley:

And we've seen it from Apple with things like the iPhone and we've seen it from other companies with various innovations. So the high-tech industry is an industry that has been characterized by innovation and reducing costs. The pharmaceutical industry is an industry that is known for increasing its prices typically 10% every year, regardless of whether there's an improvement in products or a change in the costs.

John Sculley:

Now the pharmaceutical industries really doesn't do much drug discovery. It goes out and then buys successful companies that do drug discovery after they've discovered it because the cost of drug discovery is high risk, over 90% of the efforts fail and it can take maybe eight or 10 years to get a success. So the pharmaceutical industry has huge amounts of lobbying expense to protect its pricing. The government is lobbied not to use its purchasing power, except in the VA, the Veterans Administration. That's the only place where purchasing power is leveraged for pharmaceutical drugs. And the same drugs that we buy over here in the US are sold at often less than half or even more discounted in other countries like Canada and the EU.

John Sculley:

So this is an industry that has built its incredible market value and success through special interests, and the ability to increase prices, which is completely opposite of the way the high-tech industry looks at increasing its value. And why this is significant is that we're now at a point where the big high-tech companies Microsoft, Amazon, Apple, Google all want to come into the healthcare industry. And my sense is that there is a avenue for them to come in, which is radically different than the incumbents have traditionally built their businesses. And that is to focus on the reversible chronic care diseases and the reversible chronic hair diseases are like type 2 diabetes or obesity diseases, which can be changed by lifestyle change.

John Sculley:

And of course, the types of innovations that the high-tech industry can do with heart monitors using sensors and other types of technology are now going to start to play a role in the lifestyle change of consumers who also happen to be patients, and many of whom are chronic care patients. So you've got these two different worlds. One is the traditional world of the pharma industry and all of the ecosystem players around it who have not had to change technology very recently. Just to give you a sense of where the PBMs are, all those leading PBMs that you mentioned, Ron, the technology that is the base technology of what they use today was created 35 years ago, back in the mainframe era using IBM AS/400s, Cobalt green screens.

John Sculley:

And now we're in the cloud era and every other industry that is large like financial services, retail eCommerce, entertainment has moved to cloud based technologies because they're lower cost and more efficient and more accurate. And yet the healthcare industry has been a laggard. Why? Because there's no incentive for them to lower the cost when they can focus on increasing the price and use their leverage in the market.

Ron Barshop:

There's in fact a law that was put on the Affordable Care Act, the Obamacare better it's known as, that says you cannot negotiate with pharmaceuticals on their pricing if you're CMS, which is amazing. It's actually written into law.

John Sculley:

Yeah, and so everyone beats up Obamacare and says well it hasn't been successful. Well, the politicians have done everything they can to make sure it's not successful because no one wants to rock the boat. Everyone kind of likes the way the industry has been for decades. It's the primary reason why it costs twice as much per capita for health care in the United States even with all of our talent that we have in the medical and the related scientific communities. We're twice as expensive as countries like Switzerland or others in the EU or Canada or various places like that.

Ron Barshop:

So Mario [McGarry 00:15:59] was on our show a month ago and he did a study with John Hopkins that said 48% of every federal dollar is going towards health care. That might include interest on the debt, proportionately that might include social security benefits. It looks like

they're going to co-pays and deductibles. It looks like defense, that looks like medicare medicaid of course in social security but what we're talking about is an unsustainable model. How is your model advanced going to move the ball forward on reducing costs specifically? How does machine learning do that by itself? Is there something more to your formula?

John Sculley:

Absolutely. Machine learning is obviously a huge innovation in technology but it's really a tool that enables something that is more disruptive to be successful, that is automation. So when you look at let's take the PBM world of pharmacy benefit management companies, as I said, they're running principally on technology that is decades old. And they aren't using cloud platforms as every other large industry outside of healthcare is. And so the result is you have so much work that's being done inefficiently, even using fax machines, using old-fashioned call centers, using lots of manual tasks, humans make mistakes.

John Sculley:

And when you can move to cloud platforms as the financial service industry has, to give a good comparison, you can start to bring in smart process automation. When you look at PBMs what they're doing and you mentioned this in your preamble, the principal role is to adjudicate the reimbursements, the transaction of claims and to then be able to adjudicate the reimbursements on those claims between the pharma companies and the pharmacies and the insurance companies.

John Sculley:

And of course, the pharma companies want to get their drugs listed as high on the formularies. The formularies are the priority listing of the prescriptive drugs because they want the physicians to recommend their drugs. And so it's a process that is highly dependent on manual systems that were developed decades ago. What we do at RxAdvance because we come from the high-tech world, but I've been in healthcare for 15 years. So I've had a chance to work on a number of different companies in the healthcare world, bringing high-tech innovations to the healthcare industry.

John Sculley:

And what we are doing is using something called robotic process automation. Robotic process automation means that the robots are software robots, which are subroutines, which are using machine learning and AI to be able to accurately let the machines be able to process at a substantial discount in the cost, maybe a third of the cost per claim of what the traditional systems does. Now, the large health care industry is not too happy to see this come in because as I said, no one wants to rock the boat.

John Sculley:

It's always a challenge and the way the PBMs are selected for a new bid is they go through what's called a process comparison with our competitors. And so we have to be able to conform to what's called an RFP. The RFP says you have to be able to do these certain things at this type of accuracy and you're compared to everybody else. So for example, Amazon asked all of the PBMs, including us at RxAdvance to compete in an RFP for their business. We were selected out

of 11 different PBMs that they evaluated through the RFP process because our costs are so dramatically lower, our accuracy is so significantly higher because we use this robotic process automation technology.

John Sculley:

And it's not just cool technology. If it were just cool technology, the high-tech industry would have moved into the healthcare industry a long time ago. You also have to have the deep domain expertise because this is a regulated industry, regulated at the states, state by state. Each state is different. It's regulated at the federal level. It's got all kinds of rules that have to be followed. Many of the rules have no logical sense. They've been influenced by special interests along on the way.

John Sculley:

So you have to have not just the technology know-how but you've got to also have the deep domain expertise of being able to work in this highly regulated system. So that's what RxAdvance has built, a highly regulated platform that can work with incredible accuracy. And it's all being done by robotic process automation.

Ron Barshop:

So you brought up pricing. Your system's better. Your pricing is lower. Here's what I understand about PBMs. It seems to me that I can take your 20 lowest cost drugs, take your Humera, take your stats, take your drugs that are most popularly sold, compare those on some simple website. It could be like a reverse auction website that allows every PBM to bid for the business based on the lowest cost without rebates, without spread pricing confusion. There's a lot of language. Oh my gosh, there's NADAC, which is the National Average Drug Acquisition Cost CMS requires, which really is sort of a illusory reference.

Ron Barshop:

The average employer who wants to get the cheapest drugs for their employees that are both generic in both brands because they want maybe both for their employees. What could we just literally have the lowest price drugs and head-to-head competition? Why does it have to be all this complication inside the middle of this?

John Sculley:

Well, technically, there's no reason at all why we couldn't do that. I mean our system is fully capable of that and we've been a promoter of why do we even need to have rebates. Why can't we have transparency in pricing? But the special interests are so powerful, so ingrained. The thing about the pharmaceutical world is that they are completely nonpartisan. By that I mean they give money to the Republicans. They give money to the Democrats. Everybody is on the payroll. And so you may remember that there were hearings about the PBMs. Why are the PBMs able to be so secretive about what goes on, who gets paid how much money and how much of that actually goes to the consumer, which is relatively little.

John Sculley:

And the politicians in the hearings would come out in their first five minutes and they would make these statements that it's outrageous. There ought to be more openness and stuff but there were never any tough follow-on questions. And after the hearings were finished, whether it was in the house or in the senate, nothing ever happens. Why? Because the special interests are just too powerful. Everyone depends upon them for their campaign financing.

Ron Barshop:

Yeah, there are the 565 million last year FAC reported. There's another dark money channel that they say is at least that much that's not reported but the second closest and third closest and fourth closest spend would be defense, Wall Street, technology, big oil. Together, the four of them don't even spend close to what health care spends, not even close.

John Sculley:

You're absolutely right. And so the chance of politicians coming up with say medicare for all. It's a joke. It's a joke not just because the politicians have no track record of ever inventing a brand new industry because you really have to bring in major innovation to do something like medicare for all. So if it's going to happen anything like that, it's going to have to come from the private sector but the private sector of the traditional health care industry has no motivation to make those kinds of changes.

John Sculley:

They don't want to bring in things that are lower costs, that have more price transparency that creates a better value for the consumer because that's not how they make their money. They're a sick care industry and they make their money by increasing prices, by keeping costs high and that's not likely to change anytime even if you get a different administration, a different party in power. While they may speak about all the things they want to do, it's very, very hard when you go up against a special interest to make changes.

Ron Barshop:

So I never expect change out of the state or federal capitals. It's not going to happen by the regulators either because the lobbyists are high fiving each other up and down escalator. Let me ask you a question about the health graph. So if we can agree that Amazon owns the home purchase, they own the graph of purchasing. If we agree that Apple owns the technology graph of using your phone of the using devices, and if we agree that Facebook owns the social graph and maybe Google wants the knowledge graph, what does owning the health graph look like?

Ron Barshop:

Ad let me define the health graph as being John Sculley went for a run today with his wife. She went on the Peloton yesterday. They checked into the gym last week and they checked into their doctor by tech. And it's all in one silo and the health graph knows exactly how you're progressing on your health journey and her journey. And it's all in one place and then you know exactly what you need to do next to make your health optimized. Who's going to own the health graph in your opinion? Who has the best shot at winning that race?

John Sculley:

I think the winner of that race is going to be the organization that is able to be the biggest player in lifestyle change. If you look at the chronic care diseases, that 60% of the population has at least one chronic care disease. 70% of those chronic care diseases are reversible. And if you can look at the opportunity to bring innovation in terms of preventative care, which means preventing people from getting a disease or better wellness through lifestyle change, it could be nutrition diet, could be exercise, it could be a combination of many, many things. But getting lifestyle changes is something that I think you're going to see where the high-tech industry can start to bring in some new ground rules for how we serve people with health care.

John Sculley:

The high-tech industry is clearly not equipped to be able to deal in the traditional healthcare system the way it's constructed today. It doesn't have the deep domain experience. It doesn't play to its strengths but what plays to its strengths is being able to influence people to try a different alternative. And if you look at the success stories, success stories at Apple, at Amazon, at Google, these companies have had success stories by the way in which they focus on the end user, the consumer and how they get the consumer to do things differently than they did before those companies existed.

John Sculley:

And yet if you look at the healthcare industry, it is not an industry whose first priority is the consumer or the patient. It's an industry whose first priority are the institutions in the industry. S the hierarchy of importance in the industry is all around the big providers, the health insurance companies, the other various companies that work between the insurance companies and the providers and the pharmacies and all of these incumbents. The incumbents who don't want to rock the boat, the incumbents who would prefer to get a price increase than to get a new innovation that's gonna significantly lower costs for consumers.

John Sculley:

And what we have now is we have a population that is trapped in having to not only pay a lot of money for their health insurance, but then you have to add deductibles. You have to add co-pays and you start to realize that for most Americans, let's take a middle-class income American. They're spending between 28% to 34% of their income is going on healthcare. And that's just not a sustainable situation when the healthcare costs keep going up year after year after year.

Ron Barshop:

The commonwealth funded a study that about 80% of Americans have had their raises taken away from them by health care increases. So every time you get an inflation-adjusted raise, it's disappearing, going right into deductibles and premiums and co-pays.

John Sculley:

Yeah. So if you say, what can the high-tech industry do? Well, ultimately, I think that the opportunities to dramatically not just change the cost of the health care industry, McKinsey Global Institute estimates there's $900 billion of fraud waste abuse and misuse and avoidable costs in the $3.6 trillion spend. $900 billion, just a couple hundred billion dollars of that if you could reduce the cost could give all the people who don't have health insurance, health insurance.

Or it could upgrade the people who are underinsured with better quality health insurance. Or it could reduce deductibles or reduce co-pays but that's not likely to happen because of all the things we've been discussing.

John Sculley:

So the more interesting thing I think is to say where can innovation come in, in terms of the lifestyle changes for preventative care, the lifestyle changes for better wellness, the lifestyle changes that can focus on the reversible chronic care diseases like type 2 diabetes, obesity, things of that sort because that's where innovations from the high-tech industry I think will start to make an impact. And it may not happen this year or next year, maybe it'll take the rest of this decade but I think it's inevitable that at some point, these innovations will break through because they've broken through into every other industry. Healthcare is the last holdout of the [inaudible 00:32:02].

Ron Barshop:

Actually, it happened the last three years, John. We've had two companies. One who will be on our show next week and the other one will hopefully be on the show the next few weeks. Virta Health has done clinical trials. They reverse diabetes 70% to 80% of the people on the pier. In the panel are actually reversing A1C. There's a company in Austin called Wellsmith that's not as well known and they're owned by Cone Health out of North Carolina, a $3 billion company. Wellsmith has reversed on 30% of their three different clinical trials diabetes on 30% of their patients.

Ron Barshop:

So every one point in A1C say that's 8,000 back into the health care system that's not spent. So it's a beautiful thing. Are you aware on your 15-year horizon in health care of any other companies that are actually turning the dial on these basically lifestyle diseases, we'll call them?

John Sculley:

Yeah. Well, I'll give you an example of one that I'm involved with right now. It's actually a company based in London and they have a breakthrough invention for non-invasive blood glucose monitoring. But this is very different from what let's say Dexcom is doing. Dexcom has a patch called the G6 and it's a outrageously successful company but it's really targeted at type one diabetes who need to be able to have a system that gives them insulin when they need insulin. But the type two diabetics can't afford $1,300 a year for what a G6 costs.

John Sculley:

And so if you can get non-invasive blood glucose monitoring, meaning no finger prick at all and be able to take that data and then automatically transfer that data back into online systems that are coaching people. As you know, there are companies like Livongo, Omada and others who have been very successful companies commercially for both diabetes and hypertension.

John Sculley:

Well, I can tell you in the area of medical quality sensors, I'm talking about things way beyond the sensors that you would see in a wearable watch today for EKG. I'm talking about sensors that

we're working on now with machine learning and AI where not only can we take blood glucose monitoring, but we can take other blood constituents like electrolytes, potassium and sodium. We can look at hemoglobin, A1C and be able to monitor that noninvasively through sensors that could be built into a watch or built into a smartphone. And that's just a piece of the puzzle.

John Sculley:

Also, we have now in trials, sensors where we're able to look through a lady's breast with a harmless electrical field, be able to do early detection of a breast cancer tumor long before it could be discovered with a mammogram. And if you get it early enough, nobody would have to die.

Ron Barshop:

What are the names of the company in London with the glucose monitor and the treatment for breast cancer potential?

John Sculley:

Yes, the name of the company is called Zedsen, Z-E-D-S-E-N and it's an incredibly interesting technology. It's also been being used at Heathrow Airport to replace the highly unreliable tests when people go through a passenger screening before you get on the aircraft. And those are only accurate maybe 30% of the time. So this is accurate over 90% of the time and it can look for explosives in people's shoes and things like that. They're also in tests with people who might have a melanoma that is below the epidermis. And they can do an early detection of a melanoma but below the skin without a biopsy.

John Sculley:

Those products are not on the market today. They are in the process of being commercialized and it'll probably either have a partnership or be acquired by one of the large global companies, which have the ability to get the kind of distribution that you would want for those types of technologies. But that's just one example.

Ron Barshop:

All right. So nobody's going to own the health graph until they get to reversing these diseases. And you're not betting on anybody right now but it seems like in the next 10 years.

John Sculley:

I think in terms of lifestyle changes, we will definitely see innovations that will have significant impact over the next several years. I'm talking about three to four years, but there are other things we can do. For instance, we have a company, originally it's called On Demand Pharma. You can go to Google and see it where we acquired technology from MIT about seven years ago. And the whole focus of our company is to be able to have a US source generic drugs. All of the generic drugs that you mentioned that are 90% of the drugs that are sold, they aren't made in the United States. They're made in china. They're made in India. They may be made in Israel, places like that but they aren't made in the US.

John Sculley:

And so the president has said, "Hey, we've got to have for the security of America, we need to have a US source, what are called active pharmaceutical ingredients. This company that we have called On Demand Pharma is still not approved by FDA. We're in the process of that. We have developed the technology and the technology to be able to do continuous manufacturing in a manufacturing factory that is the size of a small refrigerator. Remember, pharmaceuticals today are done in big batch systems. This is continuous manufacturing.

John Sculley:

We've received money from DOD, Department of Defense because they'd like to see this type system available in every military base in the world. There's 740 military bases.

Ron Barshop:

You're basically 3D printing drugs, right? I mean you're 3D printing with basically a pharmaceutical printer.

John Sculley:

Yeah. Well, first of all, you have to have the active pharmaceutical ingredients that are sourced in the US. And so this is pharmacology. This is not data science. And so the pharmacology technology we have and we have a terrific team and a great founder CEO, what they are up to now, we're up to about 35 generic drugs that we can make. We'd like to get up to over 75 by the time we start to roll this out commercially. But think about a future in this decade where every hospital could be able to manufacture on-site its own generic drugs. Even pharmacies could manufacture on-site their own generic drugs.

Ron Barshop:

Yes. What is the name of that company too, John, please?

John Sculley:

It's called On Demand Pharma.

Ron Barshop:

Okay.

John Sculley:

On Demand Pharma. You can go to Google and you can see it.

Ron Barshop:

Sure. We want to be careful with your time. You've been very kind and I know you have a hard stop. And we wanted to obviously welcome you back on the show any time because this is a free-ranging discussion on a lot of interesting topics. But if you could fly a banner over America with a message for all people that need better healthcare, what would that message say?

John Sculley:

I would say the message is that we have to think about health in the context of a noble cause. It's not just about how do you build a better business. It's about how do you look at better outcomes for a population that is increasingly aging as people have longer life spans. And how do we come up with a way of giving people a chance for a higher quality of life? And from my standpoint, it all goes back to lifestyle changes because while obviously lifestyle change can't solve every problem in healthcare. But it can have such a huge impact on more people at a scale that is beyond any of the other innovations that are going on.

John Sculley:

For example, I'm the founding vice chairman of a company called Celularity where a cell therapy company spin out from cell gene. And in the world of cell therapies for cancer, even when you have a big breakthrough like CAR T, the chimeric antigen receptors that are used for CAR T cells that are doing things like looking at glioblastoma, acute myeloid leukemia, multiple myeloma, many of these very serious diseases that it's only a few thousand people that have ever been successfully treated with these breakthrough technologies.

John Sculley:

And yet if you look at how you can impact the population with lifestyle changes using the next generation of medical sensors, using robotic process automation where machines are more accurate than humans, using coaching services that can be done online with robots, which are really avatars where you don't even have to have a human intervention because it's working off the data analytics that are coming through the machine learning of what you know and the feedback from the sensor devices.

John Sculley:

These are the types of innovations that don't have to be locked out by the special interests in the healthcare system. These are innovations that can break through during this decade. And they're probably going to come from outsiders. They aren't going to come from inside the healthcare industry but as they become more and more examples of success role models of success. It's inevitable that then the incumbents in the healthcare industries are going to have to get involved by these companies or partner with them.

John Sculley:

But first, the innovations have to come and it's going to come from the private sector. It's going to come from outsiders and it's more likely to come from lifestyle changes because the outsiders just don't have the deep domain expertise that the insiders have today.

Ron Barshop:

I think you nailed it. 100% agree with every word you're saying. When you talk about noble cause, you told a story here in Houston that was really powerful about the first time you met Bill Gates when Steve Jobs was recruiting you. No interview with you is complete without having a Steve Jobs story. So the noble cause is very powerful messaging, very powerful in my heart. I believe I'm in a noble cause right now, working on exactly the problems you're talking about. Can you speak to how you heard the term noble cause for the first time?

John Sculley:

Sure. Well, I'd been at apple for about three months. This is back in early 1980, '83 Steve Jobs and I had spent five months getting to know each other. We would get together every weekend for five months before I actually joined Apple. And so now I'm at apple for about three months and in the high-tech world in Silicon Valley, most of the work happens late at night time. So engineers don't usually show up much before noon but they're there at 11, 12 o'clock at night.

John Sculley:

And so I'm sitting around in the Macintosh Engineering Lab with Bill Gates and Steve Jobs and they're talking about their noble cause of how they're going to change the world one person at a time. Bill is going to do it with Shrink-Wrap Software. He invented Shrink-Wrap Software. Steve is going to do it by building the Macintosh, which wasn't on the market. It was still in development. It was going to be the first personal computer for non-technical people. He used to call it the bicycle for the mind.

John Sculley:

And I'm sitting there, listening to these two geniuses talk about creating a new industry and putting it in the context of a noble cause. And I've never heard the words in business, noble cause. So that stuck with me through the decades. And 15 years ago, one of my very close friends Robert Metcalfe who invented Ethernet, which is foundational to the internet said, "John, people like you and I need to reinvent ourselves." And so I thought about that. I said, "Well, if I'm going to reinvent myself, I'm going to do it around a noble cause."

John Sculley:

so I picked healthcare. At the time, I didn't know anything about healthcare but I've become a student of healthcare. I've helped build a number of high-tech companies in the healthcare industry and will continue to do so because I think noble cause is the way in which really big world-changing breakthroughs happen because they're in a context where you zoom out and you look across the boundaries of an industry as it's been traditionally defined. And then you find the connection points and then you zoom in and you say there has to be a better way.

John Sculley:

And so that's what drives me at this point in my life is the noble cause of how do you bring innovation pragmatically into an industry that has resisted innovation, where innovation has not been a criteria for success, and an industry that hasn't wanted to rock the boat, and an industry that has relied heavily on special interests. So how do you break through? And I think the only way you break through is you got to start with a noble cause and you got to come in as an outsider.

Ron Barshop:

By the way, one of the 20 best books that the smartest guys I know put on their list of must-reads is Moonshot!. Your book you wrote five years, six years ago. So in it, that's where I first learned about noble cause reading that book and many people have read it four or five times to just continue to use it as a bible. So thank you for that offering. John, thank you for your time. I really have enjoyed visiting with you and I agree with every word you're saying.

Ron Barshop:

It makes complete sense and you come at this from a consumer perspective serving up Pepsi, consumer perspective serving up Apple. And now you're still focused on the consumer with lifestyle changes. It's great to see your full circle.

John Sculley:

Well, thank you Ron and thank you for inviting me to be on this podcast.

Ron Barshop:

Thanks again. Thanks again to our sponsor, the MediSearch Institute. I want to read you a note a CEO friend of mine sent me who used them for a rare childhood disease her daughter had. Dr. Talbot's research was thorough. He provided clear paths of treatment and he gave me access to the best physicians. I'm so grateful for his work. That's the MediSearch Institute.

Ron Barshop:

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