Transcript: Discover Healthier: Episode 3, Diabetes (Updated)

Speaker	Start time	Dialogue	End time
Azania	0:00	Welcome to Discover Healthier: everything you need to know about health brought to you by Discovery Health. I'm Azania Mosaka. You can join the conversation as we explore some of the most pressing matters in the healthcare environment today. Our wide variety of topics and specialist guests will empower you to care for your health, now and in the future.	0:21
Azania	0:25	First we need a man who for many years was fairly active but battled weight gain, and didn't know why sometimes he felt unwell. Tony Calitz is a Discovery Health medical scheme and Vitality member who was diagnosed with type two diabetes through a routine screening test.	1:27
Azania	1:33	So let's get it started then, Tony, take me back to 2014. What was your health like?	1:39
Tony	1:39	I was about 135-137 kilograms. Gee, man, I tell you, I had serious weight problems. And early one morning, Saturday morning, it was very, very hot, I stopped along the beach trying to talk to somebody and I just felt so dizzy, disorientated, I started getting nauseous. I literally had to collapse against the wall. It didn't look that bad when they were speaking to me, but they gave me a little sweet and that literally saved my life. I felt like I was going to pass off. I knew I was pre diabetic, because I was doing these Vitality blood tests all the time and they were always above normal, but not within the high range. By the end of December, when I had my blood test [at] the beginning of January, it was 9.4. So I got an appointment with my doctor as soon as she got back from leave. It was exactly on the 6th February 2015 when the diagnosis came out that I was type two diabetic. She said to me, "Well, I got one other thing to tell you, you've got an underactive thyroid." So I said to her, "What does that be mean?" So she says to me, "You won't lose any weight." I now knew, with all my exercise, why I wasn't losing weight. So it was a combination of the two.	2:42
Azania	2:42	So there you are leading an active life, you're not losing the weight, you're not feeling as well as you think you should be feeling. You've had a blood test, you know that you are pre diabetic, but it was	2:57

		this one test, this specific test that made all the difference.	
Tony	2:57	Absolutely.	2:57
Azania	2:58	What was the importance of that screening?	3:00
Tony	3:00	I realized that thank goodness I'd had my finger prick test, which I was doing every year. That is so important. It's not going to diagnose you, you can't use it as a diagnosis, ut it is a marker; it's an indication, it's a little alarm bell. If that test is normal, you've got a good chance of being okay, if that test is on the high side, go and do the real thing.	3:21
Azania	3:21	That's amazing, Tony, but I want you to get into more details about how you changed your lifestyle. So just a little bit more detail about the systematic change.	3:32
Tony	3:32	I did a lot more research and looking into what diabetes was. I, fortunately with Discovery, I was given quite a high quality, little blood test, you know, the little finger prick test, but we focused on eating correctly, getting out there, not sitting around- I'd been a couch potato for many years as well- getting out there, doing everything that I could possibly do to make sure that this thing wasn't going to get worse. The fact is, I've had to make those changes in my life, which meant eating properly, exercise, do my blood test, I check my blood sugar every single morning religiously. It's also been very important for me to recognize the symptoms. And that is important for everybody. Whether you're diabetic, you've got a heart problem, whether you've got any other chronic problem, know what the symptoms are, know what the telltale signs of problems are, and be prepared for them.	4:24
Azania	4:24	Right. Now you seem to have educated yourself, you've armed yourself to the tee about to watch this transformation and what this change means. Talk to me about Discovery or diabetes care and what it's meant in terms of the support it's given you to manage diabetes.	4:41
Tony	4:41	Well firstly, I was very fortunate because when they brought out the Diabetes Care Program, the first thing that they said was you'd have to see a Premium Plus GP. So thought, my goodness, the one doctor who's helped me, she's a GP, she's helped me, does this mean I have to change? I phoned and I checked and wow, I was so happy	5:25

		she was on the premier plus GP list. So that was great. Discovery makes available so many various tests and monitoring facilities to you if you're on the Diabetes Care program that you don't normally have if you even a normal Discovery plan with a saver, because you get extra tests that are part of- they called it a basket of care.	
Azania	5:25	What are your numbers now, Tony?	5:27
Tony	5:27	Well, this morning it was 4.7. On average, every single day it's under 5.	5:31
Azania	5:31	Do you tell people about it, that you live with the chronic disease?	5:35
Tony	5:35	I tell people all the time. When I see people who are young and they're starting to get this boep, I tell them in a nice way because I've been there.	5:45
Azania	5:45	So Tony, let's do this, let's do this because that was one of my questions. I wanted to know from you, what motivates you? What keeps you motivated?	5:52
Tony	5:52	Vitality itself is a hell of a motivation. It really is. They're doing a hell of a lot for people to try- and I'm not trying to pump them, it's just that for me, these have been the helpful factors. What keeps me motivated is what I don't want to go back to. My two motivating factors is the way that I feel- I feel great, I don't want to go back to that situation- and the other thing is [to] be there for my wife because if something happens to me, you know, we don't have kids and family stays quite far from us. If you have a chronic problem, don't try and fight the fight on your own. Go and seek medical advice from a professional. They are the people who will put you on the right track. The second thing is, know your numbers. Do those Vitality tests. They are so essential.	6:39
Azania	6:39	Tony, thank you so much for your passion and sharing your journey with us. The way you've maintained your numbers over the years just shows that successful diabetes management is possible. Next, I speak to the experts	6:57
Azania	6:57	Joining me for this conversation are incredible experts. Endocrinologist and specialist in the treatment of diabetes, Dr. Sunday Rudder and Dr. Noluthando Nematswerani, Head of Discovery Health Center for Clinical Excellence.	7:18
Azania	7:18	So let's start by understanding what type two diabetes is and what are the differences between it	7:27

		and type one.	
Sundeep	7:27	So, type two diabetes is a metabolic disorder characterized mainly by a situation where you have a high blood sugar. Remember as a human being, your blood sugar levels are always regulated by a hormone called insulin. So, it never goes too high and never goes too low. And this is important to maintain what we call homeostasis, maintaining the body's function, so we can function in life. So, when you get type one or type two diabetes, there's a part of the system that's malfunctioning. And usually, it's insulin deficiency. In type two diabetes it's a combination of insulin resistance and insulin deficiency. And this leads to an elevated blood sugar at most times, so we need to control that. So, the difference between type one and type two diabetes... first of all type two diabetes is the more prevalent form. More than 90% of diabetic patients in the world are type two diabetic. The type one diabetic patient is a small proportion of that, also a very severe disease. But this one is slightly different in that we don't fully understand the causative mechanism; there may be a genetic risk; in a very early age in these patients, the beta cells in the pancreas which produce insulin, which lowers your blood sugar, are destroyed. And these patients need insulin from the very get-go to treat the high blood sugar, to maintain normal blood sugar to prevent complications. So these are younger patients, there may be a genetic component...we think some viral diseases may be a risk factor. And there are some studies to suggest that things like being born by caesarian section or not breastfeeding at an early age may be contributory risk factors as well. So, that's the smaller cohort. The type two diabetes patient is the more common form. As what you mentioned, it is becoming more prevalent in the world. And this is a disease that is driven... the causative agents or risk factors are all lifestyle. So, sedentary lifestyle (not being active), our food intake (the consuming of processed food), unhealthy food products, etc; stress, psychosocial stress and depression, job strain, abnormal sleep cycles, cigarette smoking, all of these...all of these are contributory risk factors. But what happens here is, over time, the body's ability to control this load is diminished. And the pancreatic cells which produce insulin are not destroyed suddenly, but over time.	9:56
Azania	9:56	Wow. So, clearly left unmanaged then. This is one of the consequences. What am I likely to feel- we spoke to Tony Calitz and he was diagnosed with	10:12

		type two diabetes- but what are the symptoms? How do I know that, potentially, I could have type two diabetes.	
Sundeep	10:12	So type two diabetes, by the time you [are] diagnosed with the high blood glucose, you're going to get the symptoms at that stage of high blood glucose, which can involve blurred vision, excessive thirst, passing lots of urine. Patients may feel tired, and they may be getting recurrent infections, very nonspecific symptoms, actually, nothing very specific to say it is diabetes so you've got to be alert. But there's this proceeding phase before you become diabetic characterized by weight gain, over a period of time, especially centrally around the waist. And these patients may also experience fatigue and nonspecific symptoms. By the time most type two diabetic patients become diabetic with a high blood sugar, they would also have hypertension, or high cholesterol associated with it. So, this may be a patient who was gradually increasing weight. Doctors maybe mentioned that they've had a high cholesterol and then later they find out they're diabetic through a blood test, which confirms you have high blood sugar.	11:14
Azania	11:14	Which is then why it's so important for us to know our numbers, so to speak. What should our numbers look like? What is the healthy range?	11:22
Noluthando	11:22	So, I think there [are] recommendations around what you need to be screening for and what test to use, obviously depending on whether you're symptomatic or asymptomatic. So, we really do encourage people based on their risk factors to actually get screened. If you are a person who's asymptomatic and don't have any other risk factors, the recommendation is that if you are over 45, you should get screened. If you are asymptomatic, we would recommend that you go and test your sugar, preferably go fasting, meaning that you have not eaten anything that day, and your glucose test can be done. For patients who have risk factors, the screening can be done at any age. So, some of the risk factors, obviously looking at family history of diabetes, looking at your weight...so if you are overweight, with a BMI of over 25, and 23 if you are Asian, looking at patients who already are diagnosed with hypertension, looking at also just the ethnic groups, if you look at Colored, Indian, Asian populations that are considered to be relatively higher risk, those patients need to be screened. Because you don't want to wait for	12:54

		symptoms, because by the time you are symptomatic, you would have been living with the condition for quite long.	
Azania	12:54	So, can we stay with that point a little bit? Just to be clear, you're saying that in our society, there are people who seemingly are more predisposed? So you said Asian...	13:02
Noluthando	13:02	So, there's the race groups, there is obviously your own presentation in terms of genetics, so if you are overweight or obese...I mean, BMI of 25 and above is in the overweight range. If you are obese, it's over 30. So, you're already at risk. If you've got a family history of diabetes, or if you were pregnant, and you were diagnosed with diabetes, then you know, your chances of being a diabetic post the pregnancy are high. And also if you have delivered a baby who's on the big side, you know, if you've got that nice chubby baby who looks very healthy to you, but they may be at risk. So, we usually look at babies who are over the, you know, 4kg, where we are saying that baby is relatively on the bigger side, they may look very cute, but I think for the mother, they must just worry about. For us, we believe that early detection is important. And that you can only do by screening, because you don't want to wait for symptoms.	14:03
Azania	14:03	So, with some of the information that you've given, as you said, it's specific to the individual, and I had a gender question in my head, but now it raises the question about myths around diabetes. What are some of those prevalent myths that people think maybe "I'm not overweight. My BMI is within range, therefore, I'm not diabetic." Is that a myth? "I'm a woman of a particular lifestyle and this is not going to happen to me." Are those common?	14:31
Sundeep	14:31	So, I think there are a lot of misperceptions about diabetes, first of all. I think when we use the body mass index as a tool to assess who's high risk and who's not, generally it's very accurate, but you can get the concept of what we call a TOFI- thin on the outside, fat on the inside. You often see these amongst the more Asian populations, where the patients are leaner, arms and legs are skinny, but they have a little potbelly. So you may weigh them and do the height and workout, the BMI, and it's normal, but they carry this visceral fat. So, there are certain cutoffs for waist circumference that can be useful in assessing risk, and the higher your waist circumference above a limit, you are at higher	16:58

		risk of diabetes. So, that's the one thing. Another thing is in, especially in areas like South Africa, there's a perception around weight. That if the bigger, the higher my weight, the more healthy I am, the more well off I am. And there's association with perception in terms of HIV through a lot of societies in South Africa, our communities... patients don't want to be seen to be losing weight. So, there's a stigma against losing weight. So, they may be overweight and at risk of diabetes, but hesitant to lose weight, to admit it or address it because of the other stigma. So, these are some of the issues we sometimes face, you know, but there are ways beyond BMI of risk-gratifying. And that's why you need a clinical assessment with some blood tests and you make an entire assessment that the prevalence itself tells you that it needs attention, and screening is important. Because not only is it increasing in developing countries of the world, as opposed to where it was in the Western countries and the developed world, but it's across age groups, both genders, and different ethnicities. And many of these ethnicities are differentially affected. It'll be my Indians, Inuits... in South Africa it's the Asian and Coloured populations, which is not to say the black population is not affected. It's prevalent across, but it's just proportionally higher. And then what we're finding in South Africa, as well, is that in the rural areas it's becoming more prevalent as well. So, that attests to the risk factors which are becoming more prevalent in rural areas, because your genetics and your physiology and biology have not changed. That's the same. So what has changed? It's the environment and access to the risk factors.	
Azania	16:58	Do you agree with the position that it is an epidemic?	17:01
Sundeep	17:01	Absolutely. I mean, we've got now...the World Health Organization reports 420 million plus patients that are known with diabetes- type two diabetes- and then a large proportion remain undiagnosed. In South Africa, we don't have accurate figures but through IDF and some other data, we've estimated at around 9% prevalence rate rates, and a further 9% may have an abnormal glucose, which is in that sort of pre diabetic phase. And of the 9% with diabetes, half remain undiagnosed. Iit's a major problem, because as you said, it's a silent epidemic. So, you're not feeling very symptomatic most of the time but the complications are starting to develop. And most patients will seek medical help when that	17:54

		complication develops and that's usually when it's quite far gone.	
Noluthando	17:54	I think for us, if we just put it into context, I think people are very aware of the HIV epidemic. But right now, diabetes kills more people than HIV does. So, if you look at the mortality, global mortality stats, you will find that it contributes more to mortality than HIV does. I think that context is very relevant in our environment, because people are very aware of HIV.	18:16
Sundeep	18:16	Death...mortality from diabetes in 2015, was more than the sum of mortality from HIV, Tuberculosis and Malaria together.	18:26
Azania	18:27	When that happens, is it because the diabetes has been left unmanaged as it's gone too far? And also, what is the failure within the body?	18:37
Sundeep	18:37	So, we're learning a lot more about diabetes. In the past, we used to say [that] at the point of diagnosis, where your blood sugar is high... Remember when you have something that's out of homeostasis, out of the normal balance of the body, that thing becomes damaging to that compartment. So, if you've got sugar in a high level in your bloodstream, it becomes damaging to the lining of the arteries over time. So, that's the main problem with diabetes. So, the complications of uncontrolled diabetes- constant high sugar- it can affect the big arteries of the body and the small arteries. So, the big arteries, we call that macro vascular disease. So, if you think about the coronary artery, which is a big artery that supplies the heart muscle, if it blocks, that's a heart attack or myocardial infarction. If it's the carotid artery or branch of it to the brain, it's a stroke and then you can get peripheral vascular disease. So, the big artery going down to the foot blocks, you reduce blood flow to that area, and you can get a gangrene. Then the smaller arteries get affected also, and usually, by the time a type two diabetic patient is diagnosed, there's already some damage to the smaller arteries, in fact. So, this is what we call micro vascular disease, a small vessel disease. So, those are the vessels in the eyes, and leading to what we call retinopathy and eventually blindness. So, it's one of the leading causes of blindness in the world. And then you can get the little arteries in the kidneys getting affected. So, that can lead to all grades of kidney failure, eventually requiring dialysis if you're lucky, renal replacement or transplant. And then the little	20:53

		nerves in the foot and other areas of the body. And even the nerves that regulate blood pressure, etc, can be affected. So, you get what we call neuropathy. You can get burning sensations under the foot, numbness, it's not uncommon to hear of patients not being able to feel anything; they burn themselves, they get sores and ulcers, they can get blood pressure dysregulation, they can get fast pulse rate, they can get what we call diabetic diarrhea, gastric, because the nerves can't control anything. And those patients are prone to amputations because through these ulcers, they get infections that spread quite rapidly, and they require amputations. So, these are drastic complications.	
Azania	20:53	Do you see how wide my eyes are? What you've just painted is just destruction of the body.	21:00
Sundeep	21:00	It is severe. And that's why I think we're highlighting it. Look, type two diabetes is a preventable disease. That's the whole point. It's something that can be completely prevented and all these complications can be prevented. Once you have it, it's a combination of working hard to reduce the burden on the body through lifestyle management and using the appropriate medication. But even there, we have adherence issues, you see. That's the biggest problem in diabetes.	21:27
Azania	21:27	Is it reversible?	21:29
Sundeep	21:29	Yes and no. It's a difficult question to answer, because we use a very individualized approach with type two diabetes. I have- and many of us will attest to this as clinicians- when you get the patient very early when the blood sugar levels have just begun to rise. There are a few patients where we do aggressive risk factor modification, and maybe just one oral therapy, that we get them reversed. And if they maintain the lifestyle, I mean, I've had patients in remission for years.	21:57
Azania	21:57	Noluthando, what is Discovery Health doing about this considering that it is at epidemic levels?	22:04
Noluthando	22:04	So, I think from our side, it really starts with the screening, I think we've been encouraging patients to screen for very long. And I think this, obviously, in our wellness program when we look at Vitality, [is] what we've been advocating for. So, screening is really key because you need to detect early so that where there are opportunities to actually halt the disease, you can, and where there's an	23:28

		opportunity to actually start treating these patients and prevent complications, you can do that. Because you can just understand, I mean, if a patient has got a myocardial infarction, which is a heart attack, that's a huge risk and huge financial cost to the scheme. You look at renal failure patients, renal dialysis, it's a very costly disease when you go into transplant and post transplant. So, the cost related to the complications are such that if you do not focus on prevention, then the house would have bolted and therefore, you will not be able to prevent some of the downward costs that come or [are] associated with the condition itself. So, it is really the focus of the business to really create an ecosystem that allows these patients to be screened early, once they are diagnosed, transitioned into care, and make sure that there is ongoing measurement and monitoring of their outcomes so that we can really...obviously, you improve the quality of life for the patient and also you improve the downstream complications related to the disease itself.	
Azania	23:28	How is Discovery supporting members with diabetes?	23:33
Noluthando	23:33	So, diabetes is one of the listed chronic diseases under prescribed minimum benefits. So, when we speak about prescribed minimum benefit, we mean [that] these are the conditions that, according to law, (obviously regulated by the Council for Medical Schemes) all schemes should be funding for for these conditions. And I think, well, the way we support it is by creating baskets of care which I've mentioned earlier, where members will have access to consults with their GPs, consults with their specialist including dieticians, biokineticists, and also they have got access to a list of medications through our formularies. So, that's really our support in terms of just making sure that the benefits are accessible and then we create the networks for members to access, you know, care with clinicians that are aligned in terms of wanting to improve patient outcomes. So, that's really how we make sure that patients have got the support. And I think it's also important to just highlight, you know, some of the networks that extend beyond- in fact, it's not even a network, it's medicine- access through our med express, making it easy for our patients to get their medication delivered to them through a, you know, just via practitioners sending through a script, reviewing the script and adhering to our formula so that members don't have co payments, and then they can get their medications	24:58

		as easily. And they can then continue to monitor and manage their condition.	
Azania	24:58	So to remove all the barriers.	25:00
Noluthando	25:00	Yes. Make it as easy as possible for them to manage their conditions by making sure that to make all the benefits accessible and partner with the clinicians because those are the people who are really in direct contact with the patient. To make sure that there is alignment in terms of what the benefits are and what the patient needs are.	25:20
Azania	25;20	I know that you have a claims tracker that gives you a lot of insights about what is happening along someone's lifestyle or along the lifespan, I should say. So, what are you seeing through the claims tracker?	25:33
Noluthando	25:33	So I mean, we see that diabetes is in the top five of our chronic conditions in terms of numbers. But if you look at, obviously, the cost, it will depend on whether a patient is a type one patient or a type two patient on insulin because remember, it also depends on the treatment that the patient is on. So, the more expensive the treatment, it means the more costly it is to manage that particular condition. Like Sundeep already indicated, by the time most of these patients are diagnosed, you find that there's already some damage that has happened, you know, so they've got other underlying complications that then these patients will need to be treated for. So, you find that you're not just diabetic or diabetic and hypertensive, and you already had had a heart attack, or you are potentially being treated for renal disease. So, all that is seen in our data as something that is on the rise. And I think we are seeing just an increase in non communicable diseases and diabetes is one of those conditions that are driving healthcare costs. And it is also just the numbers that are just increasing in terms of patients who are being diagnosed.	26:37
Azania	26:37	And I guess it requires, then, a multidisciplinary team.	26:40
Sundeep	26:40	Absolutely. I mean, the average diabetic patient would, it's advisable to see an endocrinologist, at least once-off. A good general physician or GP will take care of the cardio metabolic chronic treatment. But this patient will need in the long term a podiatrist, they're going to see an ophthalmologist	27:54

		at least once a year for screening, depending on the complications they've had, they may need a cardiologist, kidney specialist, nephrologist, a neurologist for the nerve issues, all the medication that goes with it. And there's a lot of supportive care, which I think we underplay, which is more important. So, they need psychologists, they need diabetic nurse educators, we need people that do the teaching around healthy eating habits, dietitians, supportive care from that aspect. And then for those who have had complications, many who have had a stroke or amputation, the people that help with occupational therapy, bio kinetics, we don't even have excellent systems in South Africa that do the installing of aids in people's houses to allow them to get around in the bath, get upstairs, you know. So I mean, there's a lot that goes into it. And as you said, with that comes a lot of escalating health costs. So, if we don't have infrastructure, resources for that, it becomes very difficult.	
Noluthando	27:58	We have a diabetes care program that we've put together. And I think it was because we were very aware that even though we have these benefits, and I think most of the things that Sundeep listed are currently available across our plan types to members, but we also realized that people are just not accessing their benefits. So, you find that patients are not going for their podiatry visit, they're not going to be seen by an ophthalmologist to check for changes that are related to diabetes, they're not going to see their doctors for routine screening. Which is why I think from our side, we have partnered with the GPs as the primary care coordinators of care for these patients to say, here are the benefits, can you just ensure that the basics are being done for these patients? And obviously, where it is on referral that is required, the GP will do that. But in the basket of care for these patients, we do allocate for an endocrinologist to see these patients at least once a year. We allocate for a podiatry to check their feet, we allocate for an ophthalmologist to check their eyes, you know, we allow most of these things. In fact, all of the things that are advocated for in guidelines to be paid for for these members, which is why we are partnering with the doctors to say that now that we've got the benefit available, how do you make sure that you facilitate access to these for the members, so that they are better controlled, and we improve the outcomes?	29:16
Azania	29:16	This description of this disease, how it manifests, how it changes lives, really brings in a lot of	29:28

		sympathy, a lot of empathy for children diagnosed with it. What is the approach there?	
Sundeep	29:28	So, with children being diagnosed with type two diabetes, obviously, they usually attend more the pediatric endocrinologist. The first thing to mention is that we are seeing an increasing in prevalence of type two diabetes, which is the lifestyle type two diabetes, in younger children. We never used to see that before.	29:45
Azania	29:45	What's the youngest you've seen?	29:46
Sundeep	29:46	So, the youngest I've seen is about 15 years old, right? I've read reports of a patient in the UK at three years old diagnosed with type two diabetes. The parents were feeding her soft drinks and chocolate from a very young age. She was 35 kilos of weight at age three, something like that, so it's happening younger and younger. The thing is, the empathy is there but the empathy is different kind of empathy in that I feel sad that children are being exposed to the risk factors that lead to diabetes, and that we've normalized so much of abnormality in society, in terms of our culture of eating, activity...what we consider as normal is actually bad for us. And no parent does anything with bad intention for the children, it's the good intention, this fear of missing out, they must try everything, they've got to sit on the couch and play games, because that's what everybody does.	30:43
Azania	30:43	You want to placate them so here's a packet of chips.	30:46
Sundeep	30:46	And in all this good intention, bad things are happening. And I think this highlights a very important aspect of diabetes care [which] is real, solid education that invites people to critically think. Not the prescriptive education that we're used to of "Thou shan't and thou shall. Don't and do" but actually to invite parents, young people and adults, whether you're diabetic or not, to critically think, what is my relationship with food? What's the purpose of this sedentariness? In our chase for acquisition and enjoyment in life, we work a certain way, we've got late hours, we get agitated, we stress, we smoke. So, it's not a judgment on people, I mean, we are all humans, we have desires, I mean, desires control us but it's that critical thinking around it to create a more self sufficient, independent human. And that's why I think it's a very philosophical disease. It's [an] epidemic. We're non-adherent to the laws of life	32:17

		and then we get a disease, and then as you mentioned, even though all the resources are available, nobody's accessing them. One of the biggest study or trial showed that the lack of efficacy of some of the drugs we give diabetes patients- 75% of the loss of efficacy is due to non-adherence to medication, right? So, it's almost this deep human question of we know what's good for us, and why don't we do what is correct for us? And I think if we can address that part really well, we can work on prevention and managing it better in the long term.	
Azania	32:17	Talk to me about children within Diabetes Care within Discovery Health.	32:32
Noluthando	32:32	So I mean, we do have a small number of patients who are diabetic within our books, but I don't think it is currently a huge number, but we are looking at the numbers considering that the epidemic is growing. And I think if you look, it will be mainly our type one diabetics, which is the smaller group that Sundeep spoke to, but we are aware of the increase in the type two diabetics in the Discovery World.	32:46
Sundeep	32:46	Maybe I can just mention...the type one diabetic younger patients, it's also difficult for them, because from a very young age, they've got to inject insulin multiple times a day to manage their blood glucose. This requires a lot of monitoring of the blood glucose, pricking themselves all the time, they've got to be very cautious with food, they have a high risk of getting a low blood sugar. And these patients find it very difficult and we see a lot of psychological stress with those young patients that become, even sometimes, rebellious to the whole process. And if they're poorly controlled at a young age, I mean, we've seen patients in the late teens developing already eye disease and kidney disease, you know, so it's a very difficult disease, the type one diabetes, to manage in those patients as well.	33:34
Noluthando	33:34	And I think in a complex condition like diabetes, if you have got a type one child who has got diabetes, where it's not now related to lifestyle, to explain it to a child, that they can't have sweets like other kids can, you know, they can't do some of the things that other normal kids do, it becomes very difficult. And I think the regular injections with insulin are even more complex to explain to a young person.	34:00

Sundeep	34:00	Just an interesting point on that: we are seeing an overlap of type one / type two diabetes in younger patients. So, remember I said the type one, young diabetic patient does not make insulin, so they inject themselves with insulin to control their blood sugar. But that young patient can also indulge the risk factors- bad diets, smoking- so they start approximating the type two diabetic patients. So, they'll get overweight, they'll get cholesterol and hypertension. So, there's this emerging prevalence of what we call a type one / type two spectrum, and that increases their cardiac risk and these patients can have lots of cardiac issues much earlier in life.	34:39
Azania	34:39	As a final question, the interventions are exercise and diet, changing these. How important are those in not reversing, but ensuring that there's adequate management, and bringing the numbers to where they should be?	34:52
Sundeep	34:52	So, I think living a healthy, active life and eating correctly is most important in prevention and once you have the diabetes, it's alerted you that this has contributed to coming on. So, you have to improve your activity and diet. It makes it more difficult if those two things are not corrected, to treat the diabetes, because all we can do as practitioners then is increased dosages of medication, add more medications, you end up with a situation of polypharmacy, of multiple agents, and that becomes more complex because then you've got to manage side effects. And remember, you're going to reach a ceiling eventually. And the benefit of diet and exercise in managing diabetic patients is they'll lose weight, they can control their blood sugar better, it reduces the need for adding more medication, it can delay complications, and you feel generally well. So, it's absolutely essential. But you see, we're saying it almost like it's an add on. The question is always why aren't we already doing that? And this is a deeper question that requires 10 podcasts perhaps. But it's about having an enabling environment, giving people the right information. Look at our advertising billboards- they're always pointing. I mean, I always say, advertising tries to convince you to buy things you don't need. Junk food will be advertised, alcohol will be advertised, they used to advertise smoking. But where have you ever seen an advertisement on something that's good for you? On healthy living or virtuous living? So, we live in a misinformed society. And it works both ways. You know, the patient has to try and improve, but then those in charge need to provide enabling environments.	36:34

Azania	36:34	Well, thank you so much.	36:36
Sundeep	36:36	Thank you very much.	36:36
Azania	36:43	So why do we fail to keep habits that are good for us, especially if these habits mitigate the effects of a condition like diabetes? And why do people make healthy choices? Why do we make unhealthy choices? there's often a gap between our intention and our behavior. So how do we then close that gap? So I put a call through to Jane Ball, the Head of Population Health Management, and she's also a behavioral scientist, on her findings from the field of behavioral economics around the management of diabetes.	37:15
Azania	32:21	Jane, thank you so much for weighing in on our diabetes conversation. But I want to start by understanding why applying behavioral science to issues of public health is useful in disease management and care.	37:35
Jane	37:35	Thanks, I think there are often two components: there's the structural component that supports patients to make good choices; but then there's also understanding the behaviours and why we may not follow through on what we should do. And in the health case setting there are many, many different reasons. And if we understand those, we can then start to support patients better- not just structurally, through access to certain healthcare services and the funding for those services, but also through the way of helping them make the right choices and then follow through on those choices.	38:06
Azania	38:06	So, I guess it really does add meat to this notion that prevention is better than cure. And the way we've been doing things needed to be supported with other disciplines.	38:17
Jane	38:17	Certainly, and I think there's a lot that we can learn from behavioural science. And it's been used very effectively in other areas, like, for example, in financial areas about retirement saving and other aspects, and even sort of environmental affairs have used behavioural science. And I think some of the experiments that they've done in those areas teach us a lot on how people think and behave. And that can be applied in the healthcare sector as well.	38:40
Azania	38:40	Right. So how does the medical scheme then deal with the population of people with diabetes?	38:46
Jane	38:46	So at the moment, we typically are able to look at people at a screening level. So, if they go for a wellness check, a Vitality check, then we'll be able to	39:51

		see their results and we'll be able to encourage them to visit a general practitioner so that the diagnosis could be confirmed. That's probably one of the first steps where we might identify that someone is likely to have diabetes. And once they go to the doctor and a diagnosis is confirmed, they are then able to register with the scheme to have access to certain benefits and also, then, have access to certain programs that support them. So, these benefits give you access to primary care visits with your general practitioner, access to certain specialist visits, they also give you access to pathology tests, and any other monitoring that's required for managing your condition. In addition, we then encourage you to visit a premier plus GP who can enroll you on the Diabetes Care Program. Once enrolled, you get an additional set of benefits to help you manage your condition, including access to biokineticists and dieticians, and also most recently, access to a diabetes coach.	
Azania	39:51	Right. But what insights, then, do we have from the field of behavioural economics around the management of diabetes?	39:59
Jane	39:59	I think one of the really important insights is that if you're a diabetic, you have your doctor who's looking after you, but 95% of the time, it's actually you and your own self management that's really important. So, some of the really good insights are having support structures, probably having other people who have similar sort of social experiences that can also support you, and you can support them. I think, definitely, social support is very important and it also holds you accountable. So, if you are responsible for managing your care most of the time, you want to be accountable to someone else and also have them there to support you when you're finding it tough going.	40:35
Azania	40:35	Right, so 95% of the responsibility is with us. So, why do we then fail to implement the lifestyle habits that can reverse the progress of a condition like diabetes?	40:46
Jane	40:46	I think some of it is around... it's hard in the beginning, there are initial costs to doing it, I mean, I have to change my lifestyle, which is not easy, I mean, it's very hard. And also...one of the other things that I think, really, people struggle with is just remembering to do what they need to do. There's something called prospective memory which talks to your ability to remember to do things that occur after a delay or an interruption. So, remembering to take my medicine regularly, every day; remembering to make a follow up appointment with my doctor; all of those require prospective memory. And what we	41:35

		know is as we age, our prospective memory gets worse and we're just likely to forget. You know, we often think people don't take their medicine because they don't want to or they don't understand. But I think a lot of it is that I forget and I don't remember.	
Azania	41:35	Because adherence to a new way of doing things is what allows us to reverse the progression of a condition like this. And studies also tell us that over the past four decades, the number of obese children in the world has increased. Sometimes that is of great concern, of course, and it's increased by more than tenfold. So, how do we change behavior in an entire generation to protect our children from the consequences of obesity, both in childhood and later on in life?	42:04
Jane	42:04	I think unfortunately, there's probably no one, simple solution to change it. And there's been a lot of work done in the area of behavioural science around what they call choice architecture, which really talks to how do you place things or make the choices that are available to people structured in such a way that it's easier for them to make the good choice. In the Scandinavian countries, they did a lot of work on the setups in supermarkets, and how you move through a supermarket, and then how that influenced what choices you made around food. So simple things like just making a specific section of your trolley coloured and clear that it was for fruit and vegetables- by making that larger, people were more likely to buy bigger quantities of fresh vegetables and fruit and not others. So, I think that's one of the areas where there's lots of scope in the future- around choice architecture. But the other thing is, if we look at the Vitality program at the moment where people are rewarded for buying healthy food, that certainly creates awareness around what healthy foods are, and then encourages you to continue to buy those products.	43:08
Azania	42:08	Wow. So, these little nudges, the suggestions in our environment, could make all the difference if they're designed to help us make better choices.	43:19
Jane	43:19	Absolutely.There's loads of research done just around the colour of your plate, the size of your plate, where things are placed in supermarkets, where they're placed in canteens, even what your tray might look like in a canteen- all can influence the choices that I make.	43:34
Azania	43:34	Yes, yes. Do incentives work? Incentivizing people around better behaviour, choosing better actions or better behaviour.	43:43
Jane	43:43	They absolutely work. There's loads of research that	44:12

		they work. And one of the ways that they work is because they take away that immediate cost of changing my behaviour, so they give me some sort of reward to offset that cost. But also, it starts to habitualize a certain behaviour. So, if I regularly rewarded for buying healthy food, or I'm regularly rewarded for exercising, over time that becomes my new norm. And once something is habitualized, it's far harder to derail that behaviour.	
Azania	44:12	When it comes to the Diabetes Care program, you touched on it earlier on, you are obviously within a broader program. How important, then, is goal setting? And how ambitious should our goals be considering that change of behaviour is as difficult as you've described it?	44:31
Jane	44:31	So, equally important with goal setting is also that phase where I start to act. So, I would suggest that you maybe don't want to choose too many goals, you'd want to choose two or three goals that you really believe in, and also that you are clear, then, how I'm going to achieve those goals. And then it's ready to get started. Finding the other opportunity, seizing the opportunity, and then finding nudges or other support structures like rewards programs or reminders that then keep me on track.	44:59
Azania	44:59	Hmm. And what about accountability? Is there a place for that?	45:03
Jane	45:03	There's definitely a place for accountability. I think we spoke earlier about that social support, that really having people who support me and I commit to them that I'm going to do something, [that] has a massive impact.	45:15
Azania	45:15	Are these interventions, behavioural science interventions, are they more cost effective?	45:20
Jane	45:20	They can be very cost effective. I think one of the important things that we know from behavioural science is that it's good to test these interventions first. But we do know that they can be very inexpensive interventions that can have significant impact. So, one of those interventions that we know works really well and can be very inexpensive is something that they call implementation intentions. And what an implementation intention is, is about thinking about the situation, and then planning how I'm going to act. And that can be as simple as sending someone an email that asks them to think about when they're going to go for their follow-up appointment and how they're going to get there. That can help someone create an implementation intention. I've seen implementation intentions being done through call centers, whereby simply adding	46:17

		two additional questions to a conversation can help someone plan more effectively for what they need to do in the future. And then we see that result when actually more people then follow through on those actions.	
Azania	46:17	So, you've given us a sense of the insights currently. But where is this likely to go in the future?	46:23
Jane	46:23	I think in the future, we'll certainly see a lot more support digital support bringing in the behavioural science into the development or the structure of apps and other tools that will help us. So, we know how people behave, we're starting to understand it better, and more and more we're seeing that now applied in the electronic tools that are available to help people. So, the way that we reward people, remind people, the way we message them, all of that will change as we understand more about how people respond to different interventions.	46:54
Azania	46:54	I think we could all do with a little bit more help. Jane, thank you very much.	46:59
Jane	46:59	Thanks a lot.	47:06
Azania	47:06	Well, we've heard from the experts, and what's clear is that lifestyle plays a big part in the prevention and management of type two diabetes. We have to eat healthier, get active, drink less and stop smoking. Most importantly, we have to have regular screenings. Early diagnosis is key for a healthier you.	47:26
Azania	47:26	Thank you for listening to this episode of Discover Healthier, brought to you by Discovery Health. Join the conversation on social media with the hashtag #discoverhealthier and tag @iscovery_SA. You can subscribe to our podcast channel Discovery South Africa on your favorite podcast app or visit discovery.co.za to listen to our shows.	47:49