Welcome, and thank you for joining this podcast, where we will give an update on the accomplishments of the Know Diabetes by Heart™ Initiative through 2021, and future outlook focusing on insights and key learnings. The purpose of this ongoing podcast series is to reduce cardiovascular deaths, heart attacks, strokes, and heart failure in people living with type 2 diabetes and is based on the collaborative initiative between the American Heart Association and the American Diabetes Association; Know Diabetes by Heart.

This series is brought to you by founding sponsored Novo Nordisk, and national sponsors, AstraZeneca and Bayer. I am Eduardo Sanchez, Chief Medical Officer for Prevention at the American Heart Association. And joining me is my colleague, Dr. Robert Gabbay, Chief Scientific and Medical Officer at the American Diabetes Association.

Hey Bob, how are you?

Excellent, Eduardo. Thanks for having me on the show.

Well, it's our show. And I think you and I are just going to go back and forth, and do a little bit of helping those who are listening kind of understand what this is all about. So, if you don't mind, I'm going to give you a chance to talk a little bit about Know Diabetes by Heart. What's it all about?

Yeah. It's really been an exciting three-year journey, really trying to tackle a very big problem. And as we know, the leading cause of death for people with diabetes is heart disease. And we know that, but not everybody does. And the good news is, there are now treatments that can significantly reduce the risk of cardiovascular and renal disease. And the goal of this was to really help make that happen.

So, what I'm hearing you say is in persons with type 2 diabetes, it's not just taking care of the diabetes.

Yeah. It's more than glucose. It is blood pressure, it is cholesterol. And these new sets of medications that can significantly reduce heart disease and kidney disease almost independent perhaps of their ability to lower blood glucose. So, they do lower blood glucose, but there's something special about them. And they're really underutilized.
Eduardo Sanchez: 02:26
So, we've done a lot around the edges as well, over the past three years. Where we've tried to raise awareness on the part of the general public and patients in particular, around the connection between diabetes and heart disease. We've developed and provided patient education and support tools. You all in particular, but both of our organizations collectively have been working with health systems, hospitals, and places where people get outpatient clinical care focusing on clinical quality improvement. And we've created education for, again, the general public, also for clinicians to disseminate the latest science like this podcast for the clinicians on the front lines of patient care.

Eduardo Sanchez: 03:10
So, it's been a busy, busy three years as we have focused on this relationship between diabetes and cardiovascular disease.

Robert Gabbay: 03:20
Yeah. It's really been wonderful bringing the two leading organizations in the world on this subject, heart disease and diabetes, and really been incredibly successful in a lot of ways in terms of reaching people with diabetes. I mean, like astronomical numbers of engagement, 100 million-plus media attention, which is really incredible, and all sorts of ways to engage patients and empower them through community grants that have gone out across the country. And then on the providers side, engaging those providers to understand how they can help their patients and get better outcomes. And really exciting work there by both organizations. Looking at the data, hard to believe they're 70 million engagements with healthcare providers over the course of this program.

Eduardo Sanchez: 04:17
Yeah. It has been really, really exciting. Now, one of the exciting things for people like you and me is that the science of addressing diabetes and cardiovascular disease has really changed in the past three years. I'd love for you Bob, to talk a little bit about these two classes of drugs, which even though earlier we talked about, it's not just about taking care of diabetes, the fact is that there are new medications that are about addressing type 2 diabetes that have some, what I like to call collateral benefits. Can you talk a little bit about these two new classes of drugs and how they really change the landscape as it relates to diabetes care and cardiovascular disease prevention?

Robert Gabbay: 05:06
Absolutely, Eduardo. So, I think that is the big headline here that, the SGLT2 and GLP-1 glucagon-like peptide-1 medications, have really changed the paradigm of how to manage type 2 diabetes. And in fact, in this year's 2022 standards of care are ADA guidelines that are recognized globally, we speak of considering these medications, even in the absence of the use of metformin, which has been the standard first line drugs. So, we know that people benefit from these drugs incredibly. And our goal through the first part of Know Diabetes by Heart
and then even more so in the second phase, is to ensure more people get the right medicines that can save their lives.

Eduardo Sanchez: 05:56
So, just to repeat what we know and say it again, these two classes of drugs, the SGLT2/1 inhibitors and the GLP-1 receptor agonists, have not only the effect of helping to manage glucose, but they confer cardio protective benefit. Am I getting that right? So, they not only take care of diabetes, but they help prevent the bad things that happen with cardiovascular disease.

Robert Gabbay: 06:26
Absolutely. Congestive heart failure, cardiovascular events, and a progression of kidney disease. So, they really have these added it, as you say, collateral benefits that are super important.

Eduardo Sanchez: 06:41
It would be really not too mindful of us to talk about the last three years, and not mention that we are still dealing with the pandemic of COVID-19. Let's talk a little bit about how that has changed the landscape. One of the things that you and I have talked about is that, not only has COVID 19 been a significant, just to put it as bluntly as I can, killer of people in the United States of America, in 2020 it was the third leading cause of death, it also has resulted in increased number of deaths in cardiovascular disease, in stroke, and maybe more dramatically, diabetes. Let's talk a little bit about COVID-19, and how it has affected the landscape.

Robert Gabbay: 07:36
Well, sadly for people with diabetes, the pandemic has been devastating. And the number of deaths really diabetes is front and center. Certainly, in the early days, as many as 40% of all the deaths from COVID were in people with diabetes. And so, we really are struggling with that. And at the same time, it has led to an unprecedented challenge to health care providers in managing care, and hospitals and hospital systems that has made the work that we're talking about here in terms of Know Diabetes by Heart, even more challenging because things were difficult before, and providers were busy and overwhelmed, and in many ways, it's become even more challenging.

Eduardo Sanchez: 08:24
So, just to reiterate, and everyone's aware of this, so people with type 2 diabetes were among those who were noted and then informed about their increased risk of having complicated COVID or fatal COVID. So, early on the messages around masking and around all the self-protective measures were delivered emphatically to persons with type 2 diabetes, and type one diabetes for that matter, for diabetes, cardiovascular disease, stroke. That may have had an effect on people's desire to get out and seek the regular medical care that they might have been getting. Let's talk a little bit about that.
Robert Gabbay: 09:08
Yeah. That's been a real challenge. And I think we're still dealing with it. People
understandably, certainly in the early days, quarantined themselves and were
not seeking medical care. The availability of telemedicine has been fantastic in
so many ways, and has helped fill that gap, but it's not fully filled that gap. And
so, for the kinds of, as an example, screenings that are important to prevent
progression of heart disease and kidney disease in many cases, they weren't
happening. Whether that's routine blood pressure checks to ensure their blood
pressure is well managed, to the laboratory tests that can detect kidney disease
that help other are critical to manage lipid levels, many people have deferred
care. And now that as you say, we are in February of 2022 and still dealing with
this, those gaps in care have widened.

Eduardo Sanchez: 10:10
So, my understanding, Bob, at least as I have looked at some of the literature is
that, despite the fact that clinical care practices have for the most part
reopened for business and visits are up, there is still a lag in getting to the
clinical thresholds that we were at before with regards to glucose control,
hypertension management, lipid management. So, perhaps one of the things
that we could do here and now is say, anybody listening, there should be a
concerted effort to reach out to patients, to get them reconnected, get their
medications refilled, get them vaccinated not only for COVID-19 but for
influenza not too late, and or anything else that might be due based on age and
gender, and get them back in as soon as possible, whether that's virtually using
telemedicine techniques or having people come in personally. Is that a good
way for us to spend some of our time today, get patients back in, get them back
in care?

Robert Gabbay: 11:20
Eduardo, that's a really important message for our health care providers in the
audience. This is an opportunity to literally do outreach and identify what
patients of yours you've not seen for some time, and honestly be proactive. And
for people with diabetes, this is a call to action for you to reengage with the
health care system. Because sadly, many of what things we talk about, people
may not have any symptoms until it becomes more serious. You may not feel
your blood pressure, you're definitely not going to feel your cholesterol levels.
You're not going to know if your kidneys are being damaged, unless you get
tested. And so, really important to reengage.

Eduardo Sanchez: 12:03
So, one of the things that came out of Know Diabetes by Heart is that when we
started this joint venture, there was such a newness around the two classes of
drugs that we talked about earlier, the SGLT2 inhibitors and the GLP-1 receptor
agonists. But part of what we were hoping might happen was that clinicians'
comfort with using those medications, never mind knowing about them, would
increase. Let's talk a little bit about that. Because if indeed, we're going to bring
patients back, there may be opportunity to revisit medication regimens and apply not just the science that we knew from three years ago, but the science that we are now appreciating three years into this initiative.

Robert Gabbay:  12:49
It is a great opportunity. And we know these two classes of medications, SGLT2 and GLP-1, can be so effective for people with diabetes at risk for heart disease. And the work that our two organizations have done, have moved the needle and really proud of that. So, there was a Harris poll done across the US to look at what the impact of Know Diabetes by Heart has been. And it demonstrated honestly what we were hoping, that when you asked providers and these were different types of providers that interact with people with diabetes, primary care, nephrologists, cardiologist, and they asked them, "How's your knowledge of these medications and their role in the treatment of and prevention of heart disease and kidney disease," knowledge improved, and the confidence in using them improved.

Robert Gabbay:  13:47
And one of the things that we could talk about more that I found interesting was, we also asked them, "Whose job is it to do this?" Because one of the concerns was it might be the endocrinologists, and therefore the other folks are not prescribing these drugs, or it might be the role of the primary care doctor, and therefore the cardiologist and nephrologists don't need to think about doing this. And really across the board, we saw a significant increase in everybody's saying, "Yeah, it's my job." And that was really encouraging.

Eduardo Sanchez:  14:17
And so, the notion of it's my job, is great, because everyone is taking some responsibility. I think it speaks to the value, the promise of greater interdisciplinary care, with some degree of documenting what it is that's going on. But to me, it also helps remind me about the importance of team based care. And one of the things that you, Bob, and I have talked about is the promise of doing better with team based care, doing better with the use of and the practice of guideline directed medical therapy. Let's talk a little bit about that. Team based care to better apply the knowledge gained from the science that results in guidelines. So, guideline directed medical therapy through team-based care. What of it?

Robert Gabbay:  15:16
Well, I think that is one of the big learnings that came out of our first three years. We were able to increase people's knowledge and confidence providers in terms of using these medicines. But we saw a lag in the actual use of the medicine. So, the actual prescribing of these treatments, which we know can reduce morbidity and mortality. And really the answer to that and where we're going in the next iteration of Know Diabetes by Heart is, how to coordinate care more effectively, how to use the team. And the team is the physicians involved
in a patient's care, but it's also other members of the team. Can be the team in your practice. It could be your medical assistant, it could be nurses, diabetes educators. Really all of the people that are there, because in the end, this solution here is team. Because that everyone's too busy, you can't put it all on the one primary care provider to manage everything. They need a team to get the results that we know we can get.

Eduardo Sanchez: 16:22
So important. I think another thing that bears saying is that our two organizations and Know Diabetes by Heart has the additional promise of reminding us that context of people’s lives matters. That is some of us live in zip codes and have resources around us and resources of our own to allow us to fully engage, materially engage in the diabetes self-management. There are others of us who live in zip codes and have resource challenges where understanding that can help the team a better connect what might be resources with those patients so that they can succeed in managing their diabetes and preventing cardiovascular disease.

Robert Gabbay: 17:11
Absolutely. So, one of things that the pandemic has done is act as a magnifier of some chronic problems. And one of those are the incredible health inequities that exist in this country. And as you said, Eduardo, one zip code versus another can be literally 10 years of life expectancy. And statistics like a recent survey that we did at the American Diabetes Association that said, one in five people with diabetes were often choosing during the pandemic, between food and rent versus their medications. And so, that is really part of the problem here. We need to deal with those health inequities and close that gap.

Eduardo Sanchez: 17:58
Absolutely. And that's sort of the upstream kinds of challenges, the contextual challenges of patients and anyone trying to help support the optimal care of persons with type 2 diabetes and cardiovascular disease. So, we've talked about clinical care, primarily in the outpatient setting. We've talked a bit about the context of people's lives. We would be collectively remiss if we didn't talk a little bit about the appreciation that people do end up in hospitals needing to be taken care of. And we collectively need to better apply guideline-based treatment in the inpatient setting for those with type 2 diabetes who are admitted for cardiovascular events. Let's talk just for a second about that.

Robert Gabbay: 18:49
A great opportunity there. And one of the models we saw in our quality improvement work through Diabetes Inside was hospitals essentially starting these medications as an inpatient. And it reminds me back to the day, which I'm sure you remember Eduardo, where one of the things that really helped statin adoption was the standing orders that put people on statins while they were in the hospital. And all of a sudden, that jump started the use and spread of
Eduardo Sanchez: 19:33

Yeah, I think Bob, it's just the reminder yet again. We talked earlier about team-based care. We talked earlier about interdisciplinary care. It's my job, but let's make sure that we each know that we did or took an action. But it's the reminder that coordinated systems approaches are really what we're talking about. So, really great points. And it's the reminder that we are, through Know Diabetes by Heart, actually demonstrating modeling behavior. We're working in this joint venture to promote systematic, coordinated, guideline-based team-based, patient-centered care. And while those all sound like little sound bites, they're all so critically important. So, let's bring this to a close. We are going to have the opportunity to continue working together. Is that important?

Robert Gabbay: 20:28

Yeah, I think it's really important. I can't think of two more important organizations to try to tackle this issue of heart disease and people with diabetes. And so, this first three years has really led to a lot of improvements in terms of knowledge and confidence. And it's my job. And now this next phase is really about implementation and getting it done and working as a team and coordinating care. So, we're really excited to continue to work on this problem. Because in the end, let's not forget that the number one reason why people with diabetes die, is cardiovascular disease. And so, if we want to save lives, this is where we have to focus our efforts.

Eduardo Sanchez: 21:11

So, in summary, we are both in support of the application of guidelines and practice. Know Diabetes by Heart is about promoting team-based care, empowering patients to be an active member of their health care team. Bob, what can the individual listener do?

Robert Gabbay: 21:30

Well, that's a great question. So, if you are a health care provider, do outreach for those people that have not been in to see you, because they are probably the ones that are more at risk for not doing well. If you are an individual with diabetes, one, make sure you engage with your health care provider. And when you do, you can ask a simple question. What else can I do to lower my risk for heart disease? And I'm sure your health care provider can help direct you. And sometimes we're all busy. So, a little prompt is not necessarily a bad thing.

Eduardo Sanchez: 22:06

Dr. Robert Gabbay, Bob, thank you so much. This has been fun. It's been informative. I'm going to close things here with a few requests. We want to hear from you. If you have a suggestion for future content, email, knowdiabetesbyheart@diabetes.org. It's our mission to reach as many listeners
as possible with this lifesaving information. If you've enjoyed this podcast and are listening on iTunes or Google Play, don't forget to leave us a rating and subscribe. For more information, visit knowdiabetesbyheart.org. So, again, this has been terrific. Thank you very much for listening. Stay tuned for upcoming podcasts.