



International  
Diabetes Federation  
Europe

INSULIN AT  
100

## IDF EUROPE WEBINAR

# Access to Diabetes Care – IF NOT NOW, WHEN?

How are digital  
technologies and AI  
improving access to  
diabetes care?

16 November 2021

## INTRODUCTION

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*To mark the 100th anniversary of the discovery of insulin and to celebrate World Diabetes Day, on November 16, IDF Europe organised an event on the theme of “Access to Diabetes Care – IF NOT NOW, WHEN?” with a focus on the role of digital technologies and Artificial Intelligence (AI) in improving access to diabetes care. The meeting was co-hosted by MEP Sirpa Pietikäinen, MMD co-chair, and by MEP Marisa Matias.*

## OPENING REMARKS

Bastian Hauck, IDF Europe Board Member and the webinar’s moderator, opened the meeting by reminding the audience of the importance of the discovery of insulin 100 years ago and how this major breakthrough saved the lives of millions of people living with diabetes (PwD), including his. Bastian also mentioned how advances in diabetes treatments and therapies have transformed the lives of PwD over the last decades and asked how digital technologies and AI can contribute to equitable and sustainable access to quality diabetes care in the future.

He then gave the floor to the webinar’s co-host, MEP Marisa Matias, member of the MEPs Mobilising for Diabetes (MMD) interest group and Dr. Niti Pall, IDF Europe’s Chair. In her opening remark, MEP Marisa Matias mentioned the strong rise in the number of PwD over the past two years and the importance of having a coordinated policy on diabetes and making healthcare a priority in the European Union (EU). She added that despite various actions by MEPs, more needs to be done to make diabetes a priority on the EU agenda. Dr. Niti Pall underlined the challenges healthcare systems will have to face to flatten the diabetes curve and how digital technologies and AI can help tackle this.

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***With the decreasing number of diabetologists and general shortage of healthcare professionals, there is going to be a shortage of six million doctors and nurses worldwide by the year 2030. This is where innovative digital technologies will crucially come into play to make the lives of PwD better.***

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## CO-HOSTS, PANEL MEMBERS AND SPEAKERS



**MEP MARISA MATIAS**  
EUROPEAN PARLIAMENT



**MEP SIRPA PIETIKÄINEN**  
EUROPEAN PARLIAMENT



**BASTIAN HAUCK**  
IDF EUROPE BOARD MEMBER



**NITI PALL**  
CHAIR, IDF EUROPE



**JAIVIR PALL**  
TYPE 1 DIABETES ADVOCATE



**SUFYAN HUSSAIN**  
KING'S COLLEGE, UK



**LUKE SLAWOMIRSKI**  
ORGANISATION FOR ECONOMIC  
CO-OPERATION AND DEVELOPMENT (OECD)

The webinar's speakers represented three distinct perspectives. **Jaivir Pall**, a Type 1 Diabetes advocate and digital health entrepreneur spoke from the perspective of people living with diabetes and focused his talk on the role of technologies in diabetes self management. The healthcare professional's perspective was provided by **Dr Sufyan Hussain** from Kings College London, who gave examples of the role of AI in clinical decision making. Lastly, **Luke Slawomirski**, an E-health specialist and consultant for the OECD, provided the perspective of decision makers, and addressed the potential of AI in population health management.

## RETHINKING HEALTHCARE INTO A PERSONALISED PATIENT-CENTRIC SYSTEM

Rethinking the way healthcare is being delivered to patients was a common topic throughout the webinar. Dr Sufyan Hussain mentioned the inefficiency and resource intensiveness of the traditional hospital-centric healthcare system, with its reactive rather than preventive approach. He further outlined that the transition towards a more preventive and patient-centred system to deliver ***“the right care at the right site at the right time at the right cost to the right persons”*** will be greatly facilitated by AI and digital technologies.

From a patient’s perspective, Jaivir Pall shared his experience of how technology is helping change the mindset of healthcare providers and place patients at the centre of their care by understanding them better as ***“a whole human”***. According to him, we are entering an era when the data and information gathered through these technologies are enabling highly personalised care.

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***At the centre of all these technologies and devices, there are the individuals living with them and us doctors need to try and make the best use of them***

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Dr Sufyan Hussain, Kings  
College

This view was shared by Sufyan Hussain who then emphasised the importance of co-creation between healthcare professionals (HCPs) and PwD of technologies that can maximise the value of, and access to, care for PwD.

For Luke Slawomirski, it was also crucial that ***“that every decision is made and centred around the people who need the care, who have diabetes or could potentially have diabetes”***.



## OPPORTUNITIES OF AI AND DIGITAL TECHNOLOGIES

The opportunities that AI and digital technologies can bring to the healthcare sector and the management of diabetes are immense. Policy makers and governments have finally started to realise their potential. AI can be used in areas such as **prevention** and **detection** to **inform decision making** and subsequently, **improve outcomes**.

Jaivir Pall also mentioned how these innovative technologies, such as the Artificial Pancreas Systems (APS) changed his life for the better: ***"APS are great pieces of technology designed by people who are living with the condition and understand the context of how you are living with diabetes. This led me, who was sceptical of this technology, to achieve a generally higher level of wellbeing"***.

Sufyan Hussain outlined how the transition towards digital technologies has contributed to delivering **better care** for patients, **improving access** through broader reach and **reducing operational cost**. He then provided several examples of digital technologies and AI which help improve diabetes management such as smartphone-based apps for gestational diabetes and the use of deep learning to improve diagnosis of diabetes retinopathy.

Lastly, he mentioned how APS can take away a lot of the burden PWD face and considerably improve their lives and health outcomes.

“***Due to the very nature of healthcare as an information-intensive industry, the possibilities are immense since AI is driven by data***”

Luke Slawomirski, OECD

## CHALLENGES OF AI AND DIGITAL TECHNOLOGIES

The speakers highlighted the disconnection between the hype around AI and everyday practice as well as the gaps between the development of these technologies behind closed doors and what is out there in the market for PwD to use. For Luke Slawomirski, this gap is mainly due to the lack of interoperable and scalable clean data available for use: ***"The data are often of poor quality and are held in silos that are inaccessible and are not used to their full potential"***. This view was shared by Sufyan Hussain who confirmed that ***"in healthcare there are a lot of silos and gaps of information that do not serve AI well"***.

Another important issue raised was the potential for increased inequalities that digital technologies may create for PwD, due not only to their cost but also to the digital and health literacy they require. This results in a stark inequality in access varying according to ethnicities and socio-economic backgrounds. As highlighted by Sufyan Hussain, patients' lack of familiarity with technology can be an obstacle: ***"When looking at the demographics of PwD, there is a predominance of elderly-***

***people which can also cause inequalities when it comes to access to these digital technologies as their tech savviness is in general lower"***.

The lack of trust from the general population towards the handling of their personal data was mooted as an important barrier to the broader adoption of AI and digital technologies.

***"AI and the promise of AI has been here for quite some time, but this is a slight let-down as AI for the moment has been good but just not there yet"***

Jaivir Pall, Digital  
entrepreneur and T1D  
advocate

## WHAT NEXT?

Having had a brief overview of the different opportunities and challenges of AI, the three speakers and panel members suggested areas that should be focused on to improve access to quality care for PwD. Jaivir Pall commented ***“We really need to focus on how we deliver AI and technologies, on who will deliver it, and on what tools they have to support us”***.

There was an overwhelming consensus on the need to create a holistic health data governance framework to improve the interoperability and scalability of data across borders. This is, to some extent, under way with the European Health Data Space (EHDS) initiative, but more action needs to be taken. Luke Slawomirski mentioned that this framework needs to be based on ***“the respect of security and privacy, on rules and standards that ensure data quality and interoperability, and on trust”***, a position that was shared by Sufyan Hussain. He also stressed the need to move away from the misconception that data needs to be centralised. Data can be secured and stored in a federated decentralised way and still be transferable if coded homogeneously.

Sufyan Hussain and Luke Slawomirski both stressed the important need to focus on education to tackle the inequalities and issues of trust that can arise from digital technologies. There is a need for clinicians and physicians to **educate, train and guide** people on the use of these technologies to improve their digital/health literacy and **foster trust**. Inequalities can also be reduced through the development of cheaper ways of using the technologies by, for example, combining non-invasive glucose monitoring to low-cost sensors and low-cost pumps.

Jaivir Pall mentioned ***“we have tools today that are underutilised that are starting to see the light of day but we need the support of regulators to increase their reach globally”***. For regulators to make change and put digital technologies high on their agenda, Luke Slawomirski stressed the need to gather data on the outcomes of these technologies to determine and calculate with certainty the value and cost effectiveness they can have for healthcare systems.



## CLOSING REMARKS

*The co-host, MEP Sirpa Pietikäinen, closed the session with remarks centred on the need for adequate frameworks.*

***“Creating a health data governance framework is too complex for a Member State to tackle on its own. It should be done at the EU level and be part of the EHDS. We need to think about creating interoperable data sharing and patient-centred systems to improve the life of PwD and people living with other NCDs. We need to act quickly and in a coordinated way to make these digital technologies accessible to everyone”.***

**IDF Europe World Diabetes Day events are supported by the Boehringer Ingelheim and Lilly Alliance**



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