JDRF UK's position statement on the provision of telemedicine for people with type 1 diabetes

Introduction

Telemedicine, including virtual appointments, is the provision of health related services and information via the telephone or online. It allows remote patient and clinician contact, advice, care, monitoring, intervention and education, without the patient needing to attend a healthcare facility. People with type 1 diabetes have experienced an increase in telemedicine provision in 2020.

Current situation

Before COVID-19 virtual clinics for type 1 diabetes in the UK were few and far between. Many clinics already used web services to view data shared by their patients, such as Diasend, Carelink and Nightscout. However, whilst some diabetes clinicians used virtual appointments, the majority did not. The pandemic forced the NHS to to transform rapidly, and embrace innovation out of necessity. Face to face outpatient appointments and clinics stopped, and where it was possible, moved online or via phone call.

Some diabetes technology training and commencement has switched to online provision for both people with type 1 and for clinicians. These look set to continue at least for the foreseeable future and maybe long term. Where clinics had to postpone pump starts or renewals, for example, some are now re-starting as virtual sessions (autumn 2020).

Patients report having more time with their clinicians virtually.[1] Increased time in appointments was a key recommendation of JDRF's Pathway to Choice report focused on increasing access to diabetes technology. Shorter follow-up appointments can be easier to facilitate[2] and offering virtual appointments can help to increase capacity and efficiency for clinicians due to time savings.[3] A number of patients have found they are more comfortable

[1] Reported to JDRF by patients, 2020
[2] Reported to JDRF by patients, 2020
[3] Reported to JDRF by B. Van Meijgaarden, healthcare professional in Essex

in their own home and therefore share more with their clinicians;[4] and we have heard of instances where the whole family can get involved if they are all at home.[5] It has also been reported that virtual clinics may increase interactions in between appointments. Increased patient interaction is a contributing factor to improved outcomes and HbA1c.[6] Virtual appointments can also be beneficial to those who have far to travel to their clinic, or those with mobility issues. They can also mean a patient can meet with more than one specialist at a time, instead of having to travel for multiple appointments.

But there has long been a lack of formal evidence on the effectiveness of telemedicine. And we are yet to fully understand the negative consequences of the current increase in telemedicine. They could potentially include risks of complications, eating disorders and mental health issues being harder to identify. There is conflicting information to support both yes and no[7]. There is also a fear that virtual clinics could lead to further access inequalities, such as rural patients with poor internet connectivity, patients with low IT skills, and patients who receive their type 1 diabetes care from a GP instead of a diabetes clinic (as GP surgeries are digitally evolving at a different pace). Note that it is recommended that clinical advice should be provided to people with type 1 diabetes by a specialist diabetes multidisciplinary team.[8]

Next steps

With the pandemic continuing, virtual clinics are here to stay for the time being. People with type 1 diabetes should not lose any benefits that have been gained by the introduction of virtual clinics in the long term, and it would be worth exploring whether the option of a blended approach was positive - that is, virtual clinics where appropriate/the patient chooses, and face to face appointments if telemedicine is not a suitable option.

[4] CYPDN Network WM Network, 2020, Dr Sanjay Rawal, 2020
[5] Reported to JDRF by patients, 2020
[6] Advanced Technologies and Treatments for Diabetes Virtual/Digital Clinic Forum, 2020
[7] SBK Healthcare virtual seminar, 2020
[8] NICE, NG17, section 1.2.2

We would also urgently like to see research conducted into the benefits of virtual appointments, with a view to unveiling best practice that can be rolled out across the NHS, whilst taking into account that telemedicine is not suitable for everyone. A recent global survey of more than 7000 people with type 1 diabetes from 89 countries has shown that three quarters of respondents who have used telemedicine due to the pandemic would consider continuing their use of it afterwards.[9]

Options also need to be in place for those who don't have access to the equipment or private space required to participate in a virtual appointment, whether that be a smart phone, computer or the ability to upload their data in advance. Good quality, up to date IT equipment also needs to be available for clinicians to be able to conduct the virtual appointments, as well as training for clinicians in how to conduct a good consultation via telephone or video call.

Recommendations

- Formal evidence on the benefits and limitations of telemedicine for the type 1 diabetes patient must be compiled and disseminated - to enable the consolidation of best practice and the mitigation of any unintended negative consequences

- Patient choice via blended appointment options: a choice of virtual, telephone and face to face clinics should be offered to all patients with type 1 diabetes. Virtual or telephone consultations will not suit all, and the option for face to face appointments must remain. Best practice examples - drawing on the evidence of telemedicine benefits/limitations as it emerges - should be shared to encourage the use of virtual clinics among those who would benefit

[9] Use and perception of telemedicine in people with type 1 diabetes during the COVID-19 pandemic—Results of a global survey, Scott et. al; August 2020 https://onlinelibrary.wiley.com/doi/full/10.1002/edm2.180

- Data: the visibility of shared data between patient and clinician is fundamental to the viability of telemedicine. People with type 1 should be supported with uploading their data, and provided with the means to do so where appropriate. Medical technology companies can help to facilitate this. As JDRF's Pathway to Choice report highlights, the use of data registries such as Scotland's SCI-Diabetes should be established across the UK to enable clinicians to see at a glance their high risk patients and an overall picture of everyone's data

- Data collection should in particular capture the impact of virtual clinics on lower socioeconomic groups, ensuring the hard to reach are helped and finding ways to increase their access to clinics and technology