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DTN-UK position statement regarding Flash Glucose Monitoring

DTN-UK RECOMMENDATIONS FOR ACCESS TO FLASH GLUCOSE MONITORING:

1. **All people with diabetes using intensive insulin treatment with multiple daily injections (MDI). Specifically, this will include:**
   a. All people with type 1 diabetes
   b. All people with type 2 diabetes using MDI
   c. All pregnant women (T2, GDM) using MDI insulin
   d. People with diabetes secondary to Pancreatic disease or cystic fibrosis treated with MDI

2. **There are some circumstances where people who are not using MDI may also benefit from Flash glucose monitoring. These include:**
   - People who experience problematic hypoglycaemia [>2 hypos/week] or hyperglycaemia [HbA1c > 8.5%/70 mmol/mol]
   - Those with a learning disability
   - Those who are undergoing any form of dialysis[1]
   - People who have insulin administration or glucose monitoring that must be undertaken by a third party
   - Those who have physical, psychosocial or occupational reasons that precludes fingerprick glucose monitoring

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Background:

Flash glucose monitoring is a novel way of monitoring glucose for people with diabetes. it consists of a small minimally invasive sensor that can be "worn" on the skin for up to 14 days and can be read with a reader device or a mobile phone. Randomised controlled trial data demonstrated reduction in hypoglycaemia[2] and early real-world evidence demonstrated signification improvements in glucose control[3]. In April 2019, NHS England put in place mandatory arrangements for the prescription of Flash Glucose Monitoring to people with diabetes meeting eligibility criteria, with appropriate funding attached in line with the NHS Long Term Plan. These arrangements have led to widespread availability of Flash Glucose Monitoring to those meeting current eligibility criteria, with evidence that all CCGs in England now have at least 20% of their population living with type 1 diabetes using Flash Glucose Monitoring. The latest data suggest that 36% of people with type 1 diabetes are currently using this system.

The Association of British Clinical Diabetologists (ABCD) led national audit of Flash glucose monitoring highlighted the real-world benefits of the introduction of this system, demonstrating not only significant improvements in glucose control, but also significant reductions in admission to hospital for both hyper- and hypo-glycaemia, and improvements in diabetes related distress[4]. In this study, there was a -5.2 mmol/mol reduction in HbA1c which was greater in those with higher baseline HBA1c. The number of paramedic callouts reduced from 120 to 45, hospital admissions decreased from 120-45 and the number of admissions for DKA or hyperglycaemia halved from 22 per month to 11 per month.

Similar improvements have been seen in other European countries where access to Flash glucose monitoring has been more liberal and included those with insulin treated type 2 diabetes. The recently published RELIEF study from France analysed data from 74,011 people including over 40,000 with T2DM since Flash glucose monitoring was approved for reimbursement on 1 June 2017 for all people on > 3 injections of insulin a day and demonstrated a 49% reduction in admissions for acute complications in type 1 diabetes, but also a 39.4% reduction of admissions for acute diabetes complications in type 2 diabetes[5]. Similar data have also emerged from Germany, Austria and Sweden[6] and Japan[7]. A recent paper from a managed care service in the US reviewed data from 2463 people with insulin treated type 2 diabetes and found a 32% reduction in all cause hospital admissions[8] and a study from the Netherlands with 16% T2D also reported reductions in absenteeism (18.5% to 7.7%) and diabetes related hospitals admissions (13.7% to 2.3%) in this population[9].

On 1 April 2021 funding decisions devolve back to local areas, and will therefore be made at STP (sustainability and transformation partnership) or CCG (clinical commissioning group) level. Devolving decision making back to local areas raises the significant risk that inequity of access will be reintroduced, undoing the progress that has been made.

In view of the emergent data on the benefits of Flash glucose monitoring in different populations, the Diabetes Technology Network-UK have produced the following recommendations of who should have access to Flash Glucose Monitoring. We hope this will help commissioners and providers to maintain the excellent progress which has been made.

Training requirements:

For people with diabetes:

- In most of the studies demonstrating real world improvements in glucose control and reductions in acute hospital admissions, there was little formal education provided. However, the Diabetes Technology Network -UK has put in place a series of training videos that are designed to support people with diabetes get the most from this technology (https://abcd.care/dtn/educational-resources-people-living-diabetes). These videos have had over 10,000 views between them and allow the people with diabetes to access this information and training at their own pace in their own time.

For health care professionals:

- Most HCP's in secondary care are now experienced in supporting people with diabetes using this technology. The DTN-UK has also created a HCP education program called ACADEMY that provides CPD approved educational resources for HCP's in how to support people with diabetes using this technology(https://abcd.care/dtn/education-healthcare-professionals). Since it was launched in Nov 2020, there have been over 17,000 views of videos and over 500 HCP's have completed at least 1 module. In addition to this, there are a number of bespoke edcuational resources including Abbott's own "Libre Academy (https://www.freestylelibre.co.uk/libre/help/tutorials.html) and the EDEN module from the Leicester Diabetes Centre (https://www.edendiabetes.com/news-blog/new-flash-glucose-monitoring-elearning).

Summary:

We hope that this guidance from DTN-UK will support wider uptake of flash glucose monitoring, resulting in better glucose control and quality of life for those with insulin treated diabetes, as well as short-term (from reductions in acute admissions) and long-term (from reduced complications and increased remote consultations) savings to the local health economies.

References:

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