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Briefing for the Public Petitions Committee

Petition Number: PE1619

Main Petitioner: Stuart Knox

Subject: Continuous Glucose Monitoring

Calls on the Parliament to urge the Scottish Government to make continuous glucose monitoring sensors, such as Freestyle Libre, available under prescription to all patients with type 1 diabetes.

Background

Type 1 diabetes is an illness whereby an individual cannot adequately metabolise sugar. This is due to inadequate levels of the hormone insulin, meaning that the individual has to inject insulin in order to control the level of sugar in their blood. A key part of controlling diabetes is monitoring blood sugar levels as this will guide what a person eats, their physical activity and, crucially, how much insulin they should take.

At the moment, people with type 1 diabetes typically self-monitor their blood glucose level by using a finger prick test several times a day.

Continuous Glucose Monitoring (CGM) refers to a system whereby a small sensor is placed under the skin to check glucose levels in the tissue's fluid. The sensor stays in situ and transmits information about glucose levels to a monitor. The perceived advantages of CGM is that it allows more frequent readings of glucose levels, potentially allowing the individual to fine-tune their treatment and response. It also reduces the need for finger prick testing.

Continuous Glucose Monitoring in Scotland

The availability of CGM in Scotland is guided by SIGN guidelines on the management of diabetes[1]. SIGN is a part of NHS Healthcare Improvement Scotland and is responsible for developing clinical practice guidelines for Scotland. The guidelines state that CGM 'should not be used routinely in people with diabetes'. This recommendation was based on the available evidence at that time (2010) which the guidelines noted to be of poor quality and 'conflicting' in its findings. The guidance also concluded that:

[1] SIGN (2010) Management of diabetes

> "CGM may be a useful adjuvant to conventional self-monitoring in selected adults with type 1 diabetes as an aid to improve glycaemic control, however further research is required to identify the groups of patients who will gain most benefit."

More recently, guidance[2] from the National Institute for Health and Care Excellence (NICE) in England also recommended that CGM should not routinely be offered to adults with type 1 diabetes. However, it did go on to say that it should be considered for certain types of patient, such as those experiencing frequent asymptomatic hypoglycaemia[3] or those with an extreme fear of hypoglycaemia (see para 1.6.22).

SIGN guidance is not mandatory but it is expected that healthcare professionals should take it into account in their practice. If it is considered that guidance does not reflect the most recent evidence, clinicians would be expected to look to more recent guidelines such as those from NICE.

Although the SIGN guidelines do not support the routine use of CGM at present, this does not preclude a physician from providing a patient with a monitor if they think the patient would benefit.

Scottish Government Action

In 2010, the Scottish Government published the Diabetes Action Plan, followed by the Diabetes Improvement Plan in 2014. CGM was not mentioned in the action plan but was briefly mentioned in the improvement plan which said:

> "A number of innovative tools and ideas developed for and/or could be utilised by diabetes services (e.g. insulin pumps, continuous glucose monitors and emerging sensor based technology) have, for a variety of reasons, been slow to be adopted. The challenge is to find effective ways to overcome barriers to implementation."

The improvement plan went on to include the following action:

> **"Increase the pace of adoption of proven innovations** - The Scottish Diabetes Group will work with the Innovation Partnership Board and other stakeholders to develop robust approaches to identify innovative ideas and solutions and put in place appropriate agreements and mechanisms to ensure the effective implementation of these innovations."

The Cabinet Secretary for Health and Wellbeing recently answered a PQ asking the Scottish Government for its position on providing CGM technology:

[2] NICE (2015) Type 1 diabetes in adults – diagnosis and management
[3] When blood sugar levels drop below normal limits.

S5W-03762: Answered by Shona Robison (08/11/2016):

We expect clinicians to follow appropriate national clinical guidelines and standards to ensure that continuous blood glucose monitoring technology is accessible to those who would clinically benefit from it.

Work is currently on-going to develop a national approach for the use of Continuous Glucose Monitoring (CGM) devices in Scotland, as we recognise the speed of development of this technology.

Scottish Parliament Action

The Scottish Parliament has not undertaken any work on this specific topic. However, in the previous session of Parliament, the Public Petitions Committee considered a similar petition on the availability of insulin pump therapy (PE01404).

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