



## **Recommendation for use of continuous glucose monitoring system with Ipro (CGMS)**

As a specialist unit we have a large group of patients with erratic blood glucose levels and many who are troubled by hypoglycaemia particularly among our Type 1 diabetes group.

In Wolverhampton we have the opportunity to use Glustats to help analyse individual patient's blood glucose data in order to try to establish glycaemic profile, and therefore the insulin requirements with relative precision. It is well recognised that many people on insulin have silent/occult hypos culminating in a rebounded hyperglycaemia. It is these hyperglycaemia that often lead patients to increase insulin in response. The Glustats profile may often illustrate where this phenomenon is taking place, especially overnight.

In some individuals despite doing numerous blood glucose tests in a least a 5 point profile (pre-breakfast, pre-lunch, pre-evening meal, pre-bed and 4am) we are still without a predictable profile. Use of diet diary, and a history of relevant events such as hypos, exercise levels, alcohol, and shift patterns, etc should be employed in order to try to link these events to glycaemic profile.

If despite 5 tests per day for a period of at least 1 month and use of diet/events diary a profile is not established a 5 day CGMS with Medtronic Ipro should be considered.

There is a cost implication to using CGMS, each Ipro sensor costs £37.00 (1 is required for each 5 day episode).

The patient is still required to continue to check capillary blood glucose 5 times per day in order to calibrate the device and show comparison of CGMS to data point testing to patient.

CGMS should **not** be used as an alternative to blood test if the patient will/can not test blood glucose in an appropriate manner including night testing.

CGMS may be used to establish presence of hypoglycaemia in those who do not have diabetes but are being investigated for idiopathic hypoglycaemia.

Whilst using the Ipro, the patient should be asked to adhere to a strict diabetic diet. The timing should coincide with a 'normal' week for the patient with no unusual event such

as weddings, holidays, investigative procedure, Ramadan etc. Blood glucose meter must be compatible with Ipro (list is available)

Most CGMS is started on Wednesday to return on Monday. Patient is left with instruction to remove device if it becomes uncomfortable or itchy/red.

### **Criteria for use of 5 day CGMS**

