NHS Greater Glasgow & Clyde
Mental Health Partnership
Safer Use of Medicine Group

Safer Use of Insulin

Background

Diabetes mellitus is a growing problem in the general population and the incidence is higher in people with mental health problems than the general population. In addition, many of the drugs we use in mental health settings are linked to effects on blood glucose and to the development of diabetes mellitus. Consequently, there is likely to be an increase in the number of people admitted to our services with a co-morbid diagnosis of diabetes mellitus and a significant subset of those people will be using insulin.

There have been a number of serious incidents involving insulin within mental health services. The increasing range of insulin preparations and delivery devices for the drug add to risks of incidents.

This advice note has been developed by the Mental Health Safer Use of Medicines group to make staff aware of the risks surrounding the use of insulin and to advise on good practice in this area.

1. Prescribing Insulin

It is essential that insulin is prescribed correctly. Prescribing will generally fall into two categories: initiating new insulin therapy (very uncommon in our setting) or continuing existing therapy on admission. If initiating insulin therapy always seek specialist advice.

- **Obtain an accurate history for all patients on insulin**. That should include the name and strength of the preparation used, the delivery device used, the dose and timing of each insulin dose. Standard medicines reconciliation processes should be followed to correctly identify the insulin preparations used on admission.

- **Prescriptions for insulin should be prescribed on HEPMA** by brand name, paying attention to ensure selection of the correct device and strength. All insulin doses should be prescribed on the Insulin Prescription and Administration form. This form should be kept within the treatment room and be available at the time of administration whilst in use then filed in case notes when complete.

2. Labelling Insulin Preparations

In most instances insulin preparations will be prescribed for routine use in individual patients. To aid product and patient selection insulin preparations should be appropriately labelled with the patient's name & CHI number, labels are available from Leverndale pharmacy.

- **Label insulin pens/devices and vials with the full patient identification** i.e. name & CHI number

- **Cartridges, vials and disposable pens must be labelled with the date of first use.**

3. Storage of Insulin Preparations

To maintain efficacy, insulin preparations must be stored correctly. The package insert and container will have advice on the correct storage of insulin preparations.

- Prior to initial use all insulin preparations must be stored in a refrigerator.

- All insulin preparations should be kept at room temperature while in use.

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- Non-disposable pens must not be kept in the fridge as the plastics and mechanism may be damaged by temperature changes.

- If a patient's own insulin preparations are to be used on admission attempt to ascertain how they have been stored and when they were first used. Only use them if you are sure they have been stored appropriately. For any unused cartridges or vials ensure they have been stored in a refrigerator.

- All in-use insulin pens should be stored in a segregated area of the drug trolley or patient's medicines locker.

- Insulin must be discarded ONE MONTH after first use.

3. Administering Insulin

There are a wide variety of insulin preparations and devices available. Where insulin is in use staff administering it must understand the type of preparation being used (short, medium or long acting) and know how to correctly operate the relevant delivery device. Any new or temporary staff to the ward must receive proper instruction on the use of any delivery devices as part of their induction.

- Blood glucose monitoring should always be performed prior to the administration of insulin. Refer to the NHS GG&C guideline: Diabetes, Self Monitoring of Blood Glucose

- Only administer insulin if the prescription is clear and unambiguous.

- Carefully check that the preparation name and device match those on the prescription.

- Carefully check that the patient's name and CHI number on the pen/device/cartridge match those on the prescription. The principles described in the Patient Identification Policy must be observed.

- Select the dose correctly and ensure the prescription, preparation, device and dose are checked independently by a second nurse prior to administration. The two practitioners must witness all aspects of the administration process i.e. preparation selection, drawing up the dose and the administration of the dose.

- Where the dose is being drawn up from an insulin vial, only insulin syringes designed for the purpose should be used.

- Patients may self-administer insulin if their mental state allows and only as part of a formal self-medication programme. If self-administration is appropriate a nurse must check the prescription, preparation, device and dose before the patient administers the insulin.

The advice above is intended to provide a framework to support safer use of insulin with mental health settings. Use of insulin can be complex and is associated with significant risks for patients. Contact your local pharmacy or specialist diabetic service for advice and help. For more detailed information on the administration and use of insulin, the e-learning package Diabetes Think Check Act (5 modules) is available via learnPro

The following resource is also provides comprehensive advice on the management of diabetes in a mental health context LE Mental Health & Diabetes

Further information on acute management of diabetes can be found here

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