Drug Safety Update

Medicines Matters

Issue 20 – 14th August 2025

NHS Lancashire and South Cumbria Integrated Care Board

Keeping Insulin Treatment Safe and Effective Is Everyone's Responsibility

Following several incidents in one of our local Trusts, we wanted to raise awareness of dangerous practices which can lead to patient harm, including:

- Incorrect dosing of high strength insulin.
- Insulin being drawn up directly from a cartridge or pre-filled pen device using an insulin syringe and needle.

Practices are reminded that insulin is a time critical drug: failure to administer insulin at the correct dose and at the correct time may result in poor diabetes control, hypo- and hyperglycemia or even death.

Practice Reminder:

1. The RIGHT insulin, at the RIGHT dose, in the RIGHT way and at the RIGHT time

Right Insulin	Right Dose	Right Way
• Insulin must be prescribed by **brand**. • Ensure the correct **insulin strength** has been selected when prescribing. • Ensure the correct **insulin device** has been selected and the patient has been trained how to use the device. • Ensure the **quantity of insulin** prescribed is appropriate for the individual patient's needs. • Be aware of look-a-like and sound-a-likes e.g. NovoRAPID vs NovoMIX.	• **NEVER** use an insulin syringe to withdraw insulin from a cartridge or pre-filled pen device. Patients and/or carers should also be informed of this. • There is a risk of withdrawing the wrong dose if an insulin syringe is used to withdraw insulin from a prefilled pen, and of damaging the pen.	• Cartridges must only be used with compatible reusable pen devices. • Ensure the correct consumables have been prescribed for the insulin device e.g. insulin pen needles for pre-filled pens, sharps boxes.

2. High Strength Insulins

The standard insulin strength is 100units/ml however, there are several high strength insulin products available as 200units/ml, 300units/ml and 500units/ml.

There are some key differences in high strength insulin devices not only with how the device works but also with:

- the number of insulin units available in the pen,
- how patients 'dial up' the required drug dose on the pre-filled pen,
- 'dose adjustment steps'.

For example:

- **Tresiba 200units/ml FlexTouch** delivers doses in steps of 2 units.
- **Toujeo 300units/ml DoubleStar** device also dials up in 2-unit increments.
- Both therapies therefore need to be prescribed in **even units**. If requests for odd dose units are received, primary care clinicians should contact the prescriber/Diabetic Specialist Nurses and challenge the dose and ensure this is corrected.

To support safety around high strength insulins the medicines optimisation team have developed an EMIS search that looks for patients who are prescribed two high strength insulins - **Tresiba 200units/ml FlexTouch** (branded and generic) and **Toujeo 300units/ml Doublestar** (branded and generic). The search will help practices identify any **odd** dose units that are being prescribed, so these can be reviewed and action taken.

We would encourage practices to run these searches periodically (at least annually) as this has been linked to a 'NEVER EVENT' within our ICB. Your Medicine Coordinators can support you.

Practices are also encouraged to undertake medication reviews/diabetic reviews on existing patients on high-strength insulin. During reviews the latest hospital documentation and/or shared diabetes consultation records should be checked to identify prescribed insulin doses. Prescribers should consult the Summary of Product Characteristics (SPC) and any incorrect/inappropriate doses should be challenged.