

Patient Safety: Insulin Prescribing and Dispensing Key Points for Primary Care and Community Pharmacies

Summary

Following a recent [safety notice](#), this document has been prepared to share key points when prescribing insulin.

Insulin should only be initiated by a health care professional with adequate knowledge and training (this can be primary or secondary care diabetes teams). The person starting on insulin needs to be given appropriate knowledge and training on insulin.

Insulin should always be prescribed by **brand name**, with the **correct concentration** and using the **correct device**. The **dose of insulin** is measured in **units**.

Actions for Prescribers

Prescribers should only prescribe [Grampian Area Formulary](#) approved products unless advised for individual patients under specialist advice from the diabetes team.

Prescribe insulin by brand name

- Particular care should be made when prescribing insulin as many brand names sound similar.
- People with diabetes established on insulin should not have their brand of insulin changed without discussion.

Prescribe the correct concentration

- In Grampian this should be 100units/ml.
- Other strengths are not routinely recommended in Grampian, but may be used in individual patients under specialist advice from the diabetes care team.

Prescribe the correct device

- The correct device for the patient should be used at all times, and stated on the prescription.
- Devices are prefilled pens, cartridges or insulin syringes and vials.
- Insulin syringes should only be used with insulin vials, never with cartridges or pre-filled pen devices.
- Using insulin syringes to draw up insulin from cartridges or pre filled pens may result in the incorrect dose being given.

Insulin doses should be prescribed “as directed”

- The majority of people on insulin will self adjust insulin doses from day to day, depending on carbohydrate intake, planned activity levels and current glucose levels. Given frequent dose adjustment it is not appropriate to prescribe a fixed dose.

- Training on how to do this will be given by the person who has initiated the insulin.
- If known the usual dose, range of doses or insulin to carbohydrate ratios can be listed in additional comments e.g. Novorapid 1units for every 10g carbohydrate with meals, Novomix 30 18-26units before breakfast and evening meal.
- For people who are getting district nurse administered insulin, insulin doses will be recorded in the prescribing sheet.

Changing insulin brand, concentration or device

- The insulin brand, the device being used or concentration of insulin should not be changed without discussion with person with diabetes.
- If the brand of insulin is changed a dose adjustment may be required.
- If the concentration of insulin is the only change i.e. the brand remains the same, no dose adjustment is required as providing the correct device is being used the device will deliver correct number of units. For example, if someone is on 20 units of Tresbia Flextouch (100units/ml) and after discussion with them it is changed to Tresbia Flextouch (200units/ml) the dose should remain at 20 units.
- If the device is changed the person with diabetes needs to know how to use new device and have access to the necessary equipment e.g. if prescribed cartridges they will need to have correct insulin pen for those cartridges.

Actions for Community Pharmacies

- Pharmacy teams are reminded that it is good practice to confirm insulin products with the patient or person collecting prescription before the medication leaves the pharmacy, to prevent insulin related errors.
- If there are any difficulties obtaining a particular brand of insulin, advice can be sought from the primary care diabetes team, community diabetes specialist nurse or the secondary care diabetes medical team (see [Grampian Guidance](#) for referral pathways).

Any queries relating to this information should be directed to Lindsay Cameron, Medication Safety Advisor, NHS Grampian at lindsay.cameron2@nhs.scot